Did Aristotle have a concept of "intuition"? Some thoughts on translating *nous*

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In this paper I propose to review existing translations of *nous* in Aristotle in order to show that translating it as "intuition" is problematic. A proposal to find a new direction for interpreting the term is given, based on a richer understanding of the modern notion of intuition in cognitive psychology. I end with adding some passages to the usual set which deserve further investigation.

Introduction

In at least three accounts discussing knowledge Aristotle makes certain claims about how we acquire knowledge, and in one passage he talks about a form of comprehension which is described as "an unmediated grasp of important foundational concepts" (e.g. *APost.* 99b20–21¹). This phrase, translating important Greek terms, already commits itself to a certain interpretation of key concepts, centered around *nous*. In this paper it is my modest aim to discuss an issue connected to translation and its impact on interpreting concepts. I will first introduce the problem and its context before dealing with the choices underlying translation. As this is a preliminary exploration, the net result will be limited and mostly negative in that I reject the indiscriminate use of "intuition" for *nous* and only give a rough sketch of how this line of enquiry could be pursued.²

The usual way to unpack Aristotle's statement quoted above is to focus on "unmediated", and to say that what he means is grasping a state of affairs or an object without (discursive) reasoning. Reasoning would here have to be deductive reasoning, so that "unmediated" can also be read as "without explicitly providing

I have followed the normal convention of referring to passages in Aristotle, which is to refer to the page numbers, column letters and/or chapter sections of the standard edition of the works of Aristotle, edited by Bekker. These page numbers, column letters and chapter sections are repeated in all modern editions of Aristotle's works.

² I take my approach to be complementary to Lesher 1973, who (with some qualifications) also goes against describing *nous* as intuition (45, 64), attacking the problem from the Greek side and narrowly focused on *A Post*.

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a cause or a middle term". The Aristotelian notion I am talking about is of course *nous*. The claims Aristotle makes about *nous* have evoked elaborate discussion, in particular over the question whether his account of knowledge is really empiricist or whether at the end of his *Posterior Analytics* in his genetic account of the acquisition of knowledge (the famous chapter 2.19), he gives in to a form of rationalism (Kahn, 1981). But in this paper I shall not decide between the

Aristotle, by Francesco Hayez, 1811.

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empiricist or rationalist camp. In most interpretations the notion of *nous* receives different translations but many use the term "intuition" — a term which in almost all cases remains either undefined or under-defined. It is my claim that the translations cover up the more fundamental issue to what extent the modern concept of intuition (whatever that is) can be mapped onto Aristotle's account of *nous* or intellect, and whether such categories as "empirical" and "rational" do justice to his view (cf. Kahn, 1981).

I believe that the translation of *nous* as "intuition" covers up a misconstrual of this notion which requires clarification. Moreover, since *nous* is said to play a role in the attainment of basic starting-points (*APost.* 2.1; *Topics* 1.14), one's initial reaction is to resist giving such an important role to what many take to be a non-rational faculty. It also raises the further question, which I cannot answer here, of how it relates to the claim that dialectic reaches principles and why Aristotle would need both. So for now I intend to do two things: first, to look for a clearer and, as I hope to show, a richer notion of intuition from a contemporary perspective; secondly, to place this against Aristotle's implicit and explicit claims about *nous*. The main part of the paper constitutes an exploration of the notion "intuition" and is partly in the form of a critique of some existing interpretations. I stress that it represents a preliminary exploration of a terminological issue which is fundamental to interpreting Aristotle's core notion of "unmediated grasp".

I. Empirical versus a priori?

Given that we do not have one systematic treatise setting out Aristotle's "theory" of knowledge, the first problem with his epistemology is that one needs to reconstruct it from several passages in different works. At least three accounts typical of his perspectival approach are usually included: there is his account in the On the soul, dealing with perception and mental processes, another in the Ethics on mental states preceding proper actions, and yet another one in Posterior Analytics on a formalised system of demonstration based on unmediated, true premises. Here it is not obvious how to reconcile the foundationalist claims in his dialectical methodology with the so-called scientific claims about knowledge. Barnes (1969) countered the Baconian picture that the Posterior Analytics would be a systematised methodology for scientific investigation, while suggesting that it was rather a methodology for teaching and imparting knowledge. Yet more recently Burnyeat (1981) qualified this by pointing out that this would be a poor form of pedagogy, while he suggests persuasively to view demonstration as a way of imparting understanding by leading the advanced student on the basis of her implicit knowledge to full and understanding by demonstrative method.

Limitations of space do not allow to bring out the investigative role dialectic (defined in a specific way) can play according to Aristotle and how it is useful in the search for "first principles" as a kind of meta-theory, so a summary account

will have to suffice here. Aristotle argues (rightly) that a specific science cannot determine its own principles within the framework of its own field (*Top.* 101b; *Rhet.* 1352b). Thus dialectic can be construed as a valuable part of scientific methodology, arguing from foundations to *the* foundations, whereas Posterior Analytics represents the deductive route arguing *from* foundations (cf. Evans, 1977).

Let us now consider some of the implicit claims about *nous* which can be found in the following translations: "intellectual intuition" (Ross), "mental intuition" (Alan), "intellect" (Grote), "intuitive reason" (Lee, Ross). These translations seem to make *nous* a quasi-mystical element in the account of how we acquire knowledge. It is important to see that this is not a mere verbal point. The specification of adjectives in e.g. Ross' and Alan's version ("intellectual" and "mental") sound an apologetic note and apparently are meant to qualify the concept in such a way that we may forgive them for using the word "intuition" at all. Whatever the word means, they seem to tell us, we should be picking out the intellectual aspect of it, while implying that there is some other side to intuition, the kind we don't want here.

While we all use the word "intuition", and think we more or less know what it means, this seems to involve some kind of self-referential justification in that we very often don't make explicit what it means. To put it another way, we seem to know intuitively what the word "intuition" means. This is highly uninformative and smacks of circularity. But in approaching an ancient thinker with similar and systematic concerns about knowledge it is unwise not to be explicit about such complex terms. One simply does not want to import unwarranted meanings or notions. The least one can say, and usually does say, is that intuition involves immediacy in grasping objects or states of affairs. But that seems hardly sufficient. So should we say intuition is a composite of intellectual and non-intellectual elements, or can it only be one of these? Or is there yet another way of interpreting it? Whichever way we do interpret it, it seems clear that our own (modern) idea of intuition is likely to be of importance in trying to define Aristotle's nous. We should however beware that we do not import or impose our notions onto his, which as we just saw leads to an awkwardly apologetic or distorted rendering of terms.

There is currently considerable debate and progress on our understanding of intuitive knowledge and its role in discovery and creative thinking. I want to explore how contemporary views on workings of the mind might help understand this idea of immediacy and insight in Aristotle. I here make selective use of some current ideas on intuition in cognitive sciences, most of which make no reference to Aristotle.

A recent account of intuition in the area of psychology will help us establish some firmer ground for defining intuition on the basis of evidence acquired in experiments. G. Claxton has written a broad study on the role of intuition collecting up the results of empirical investigations spanning several decades. His aim is encapsulated in a remark about the still current position towards the notion of

intuition: "Those who disparage intuition are reacting, often unwittingly, against the presumption that intuition constitutes a form of knowledge that is 'higher' than mere reason, or even infallible" (Claxton, 1998:50). A two-step analysis will show how we can make sense of this statement, and it will also allow us to argue about the relation between the rational and non-rational in a meaningful way. I should stress that Claxton is not trying to clarify intuition per se or — to mention another common example in this context — to explain such things as the female intuition of mothers who just "know" what their babies want (without wanting to disparage this). Claxton rather focuses on creative thought, in particular when we are forced to deal with new and complex situations which require creative decisions. The evidence shows that decisions made after study and reflection of complex data usually arise without full awareness of their origin. His emphasis is also more on the process of intuition as non-linguistic thought rather than on its results and the question to what extent they are a reliable basis for belief or decisions.

I shall start by provisionally adopting Claxton's new definition for intuition: "a mental process which is non-conscious, but nevertheless rational". This working definition will allow us to disentangle the rational from the irrational within the concept of intuition, which Claxton sees as a kind of borderline phenomenon between conscious and non-conscious thought. Claxton's analysis is based on a very interesting synthesis of a range of recent experiments into creative non-conscious mental processes which exhibit patterns indicating a degree of rule-following and consistency (i.e. they can be termed rational). Experts have agreed for some time that the Freudian notion is untenable, that is, we should not divide the mind up into conscious and subconscious, in which the second is that infamous quagmire of problems from one's personal past. It remains to be seen, however, to what extent the negative aspect of the Freudian dichotomy still influences the way in which we speak about intuition and a concept such as Aristotle's nous. The sense of embarrassment noticeable in the authors of the early twentieth century, indicates that they were not yet free from this implicit set of values regarding the oppositions rational/conscious and non-rational/unconscious.

As an alternative to the Freudian picture of intuitive thought Claxton argues persuasively for a double threshold in our mental make-up, one between the conscious and non-conscious, while further subdividing the non-conscious into two sections, one of which is located "below" the conscious and above the subconscious. The criterion here is accessibility, that is, the extent to which we are consciously aware of our mental operations. On the basis of indirect evidence, certain non-conscious processes can be shown to be rational, in the sense that they obey certain implicit rules (for example, we normally anticipate the shape and size of a room upon entering, assuming it will not have a floor slanting at a very sharp angle; experiments using optical illusions show that the suggestion of a sharp slant upon entering a room will take us by surprise and influence our body movements accordingly without conscious decisions). One major outcome of the experiments

is that there is a very active (though slow) mode of thinking, which, while non-conscious, has a major role in creative thought. Such evidence is mostly indirect, but the sample is considerable and accumulative. The basic mechanisms of this "undermind" (Claxton, 1997:52) are analogy and imagery, and it is non-linguistic thought which operates according to certain rules. That is the reason why I think this can be helpful in looking at Aristotle's notion of "unmediated insight" or "comprehension" (Barnes): just because we don't know where an idea is coming from does not mean it cannot be valuable.

The implications of this division of the mind are considerable. First, it helps to demystify those activities of the mind which are involved in creative thinking, famously reported by scientists as thinking in images when reaching important insights or making breakthrough discoveries (Kekule, Einstein). Second, it allows for a form of rational thought at a non-conscious level which can be used as an explanatory factor in making thinking responsible for the premature articulation of ideas. The transition from this implicit knowledge to a more explicit form might be exemplified, for example, by the so-called "tip-of-the-tong phenomenon", where certain ideas only "break" through the (upper) threshold into our consciousness when one is relaxed and uninhibited by rational control. Claxton's aim is to make us trust our intuitions more, ours is to reach a more detailed understanding of intuition.

II. Aristotle and premature articulation

If we now go back to Aristotle, this picture can be usefully tested. There are obvious similarities with this notion of "intuitive" thought as the premature articulation of ideas and intuition.³ It would of course be rash to think there can be a full overlap in the features that are emerging from modern cognitive views and the functions ascribed to *nous*, as there are also some clear differences. For instance, the contemporary view is *not* that intuition is infallible (see Claxton quote p. 4; cf. Kal, 1988:47 ff.) whereas for Aristotle *nous* itself cannot err (*APost.* 2.19, 100b7–8). But what this more explicit and richer notion of intuition does do is avoid the embarrassment of the irrational so often implied in the corrective definitions and translations discussed earlier: by allowing for a non-conscious, or pre-conscious, stage of thinking which exhibits regularity ("rules"), we can be justified in thinking that non-conscious thought is not fully irrational.

What kind of work did Aristotle expect the *nous* to do? We can glean certain things from the way in which he positions it at the centre of the theoretical and practical, featuring in both intellectually high-order insight and as immediate grasp as a basis for know-how (practical *nous* in the ethics and crafts, *EN* 6). Aristotle makes at least the following claims (based on Lesher and Barnes):

³ Cf. Kahn, 1982, 396: "the preliminary or pre-scientific recognition of a phenomenon".

- (1) it is "more accurate" (*akribesteron*) than any other kind of knowledge (100b8–9) and "more true" than *episteme* (not be taken as infallibility, as Lesher points out [63], since both *episteme* and *nous* are always true. *Akribeia* here seems to mean "most in possession of its first principles")
- (2) it is also called both *gnôsis* ("knowledge by acquaintance") and *epistêmê* ("scientific knowledge"), 99b24, cf. 71b16, 72b18–21, 76a 16–22 (Burnyeat 1981: 131)
- (3) it is a way of grasping things which are most knowable and familiar in themselves (100b9–10; cf. 72 b24–5), a disposition (*hexis gnôrizousa*) which implies full conviction and understanding (presumably "full" as opposed to "implicit" or "partial")
- (4) *nous* represents a more abstract level of understanding, in the sense that it is said to be "further from perception" (inferred from 86a29, cf. Barnes, 1993: 187).

These features suggest a path to understanding which allows empirical input (Lesher, 1973:62): obviously much more is involved, but it is clear that Aristotle allows it to be reached by induction. So if we adhere to the sense of "intuition" defined as a grasp of things in an unmediated way, we can, I think, still use the term for *nous*. Think of a person concerned with making moral decisions and how to explain her reasoning in such a way that she would not have to go through a syllogism first before implementing action, yet somehow she knows the reason for doing it (a worry about Aristotle's picture). This form of intuitive grasping might account for that, since the suppressed premise *is* grasped (as in the *enthymeme*).

One consequence of this position seems to be that we have to reject Lesher's rejection of "intuition". He tentatively presents two definitions, one (which he accepts) is rather bland and uninformative: "simply to have an insight or realize a truth" (1973:64). The other is "a faculty which acquires knowledge about the world in an *a priori* or non-empirical manner" (ibid.). I think the underlying distinction between intuition and empirical is a telling one. It limits intuition to the part of mental activity which is not relying on empirical evidence.

His conclusion that *nous* is "the grasp of the universal principle, acquired by induction from particular cases and constituting the source of scientific knowledge" seems plausible. This interpretation allows us to determine to what degree the grasp of principles involves reasoning of some or any kind. I would also hold that it saves us from the suppressed embarrassment of requiring a term which needs "upgrading" to become philosophically acceptable. Barnes' term "comprehension" avoids that aspect by sufficiently indicating intellectual activity, but it seems an impoverishment in relation to the perceptual basis of intuitive thought.

I admit that this thumbnail account is only a first exploration and leaves much undiscussed, such as the role of *phantasia* which is an important factor in memory,

dreaming and as intermediary between perception and thought. Another important question is whether we can attribute to Aristotle a notion of unconscious processes at all. It is this particular question which I want to look at briefly as a way of indicating the next possible step in the analysis of *nous*.

III. Unexplored territory: pre-conscious processes in Aristotle?

If I am right to take this revised version of *nous* as sometimes representing sudden unmediated grasp, this could lead to an interesting follow-up. It allows for certain aspects of Aristotle's remarks to be taken as an indication of an awareness of unconscious processes. Granted, it is of course one thing to use contemporary concerns and research into intuition as a way of *clarifying* Aristotle's — in itself a justifiable method in history of philosophy —, it is quite another to claim that he came close to a notion of intuition like ours. I shall therefore present a few examples to see whether there is room for further narrowing the gap between his notion and ours. This means I will tentatively explore some passages rather than present a fully argued case.

Four passages come to mind which exhibit features hinting at creative thought:

- (i) analogical thought is mentioned in *Topics* 1.15–18, where he discusses the instruments for coming up with arguments and propositions, and recommends trying to think "laterally", across generic borders of certain areas and disciplines;
- (ii) pictorial thought processes are mentioned in *On Memory* which somehow gives place to the non-linguistic (perhaps to be compared to some aspect of *phantasia*).

In addition, there are those thought processes we are not always aware of while they occur:

- (iii) In *On Dreams* he speaks of "unnoticed" stimuli which do occur and return in dreams. What could these be, and what does he mean by "unnoticed" (after all he is able to talk about them)?
- (iv) Finally, he mentions a mental activity called *ankhinoia*: "a talent for 'quick thinking'", which in the context of syllogistic reasoning means "'spotting' the middle term (cause) in an *imperceptible time*" (*APost.* 1.34, 89b10–11; Barnes translates "acumen"). Here the language resorts to visual metaphors, as if it were only a matter of "seeing" the solution: what Aristotle may be trying to convey here is the immediate and non-linguistic aspect of thought. It is "immediate" both in time and in appearance, because it takes no time at all, and lacks "mediation" by way of intermediate premises or steps.

These examples may exhibit rather superficial similarities with what we now think of as intuitive thought. Yet the views expressed exhibit, if not explicitly then perhaps intuitively, a grasp of certain aspects of non-conscious processes in our mental make-up. This deserves a closer look, not only to arrive at better documented picture of his account of mental states, but also to explore further whether his view on an understanding of, and thinking about, the world was setting out on a new path by including less obvious features of our mental capacities into a wider epistemological framework.

To conclude, I hope to have shown that a way of approaching the issue of "unmediated grasp of basic concepts" from a new angle can be fruitful. The conceptual analysis will need to progress by reformulating the problem as to how we can think about *nous* and its contemporary counterparts. Post-Freudian analysis requires awareness of the cultural baggage involved in common parlance about the mind's characteristics and activities. The lack of a full overlap between Aristotelian *nous* and our modern "intuition" warns us not to clarify one problematic term with another.

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