ABSTRACT. On the epistemic view of vagueness, a vague expression has sharp boundaries whose location speakers of the language cannot recognize. The paper argues that one of the deepest sources of resistance to the epistemic view is the idea that all truths are cognitively accessible from truths in a language for natural science, conceived as precise, in a sense explained. The implications of the epistemic view for issues about the relations between vague predicates and scientific predicates are investigated.

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On the epistemic view of vagueness, a vague expression has sharp boundaries whose location speakers of the language cannot recognize. This is not to deny that vagueness exists; it is to assert that its underlying nature is epistemic. The view may go back to the great Stoic logician Chrysippus. It permits the application of classical logic and bivalent truth-conditional semantics in their full strength to vague languages. Nevertheless, many philosophers are willing to forego these advantages and reject the epistemic view, because they believe that it outrages compelling intuitions.

This paper does not attempt to rehearse a full-scale defence of the view, still less to survey all the alternatives. That has been done elsewhere; it involves an investigation of the general cognitive principles which explain our ignorance in borderline cases. A more limited project will be undertaken here. It will be argued that one of the deepest sources of resistance to the epistemic view is the idea that all truths are cognitively accessible in a sense explained below from truths in a language for natural science, conceived as precise. Once the idea is stated clearly, its questionable nature becomes apparent. Vagueness has too often been studied as though from the standpoint of a privileged perfectly precise language. Such an external standpoint on vagueness is arguably impossible, not even fully imaginable. One has to study the phenomenon from within. Doing that is just what many formal theories of vagueness attempt to avoid.

Section 2 makes the connection between resistance to the epistemic view and the language of natural science. Section 3 investigates the implications of the epistemic view for issues about the relations between vague predicates and scientific predicates.
The epistemic view of vagueness strikes many philosophers as simply outrageous. The elaborate arguments against it which they sometimes go on to construct seem to be rationalizations of a more basic feeling. To say this is not to deny that the arguments require a serious answer, but the present concern is the feeling itself. It is often expressed like this:

The epistemic view permits this situation: $h$ is a heap, although $h$ is a borderline case of a heap. But what makes $h$ a heap?

The suggestion is that $h$ is a heap only if something makes it a heap, and that the epistemic theorist can offer nothing to make it a heap. Alternatively, the feeling may be expressed metalinguistically, like this:

The epistemic view permits this situation: the word 'heap' applies to $h$, although $h$ is a borderline case of the application of 'heap'. But what makes 'heap' apply to $h$?

The suggestion is that 'heap' applies to $h$ only if something makes it apply, and that the epistemic theorist can offer nothing to make it apply.

The two objections are not mere rephrasings of each other. A description of the use of the word 'heap' would be directly relevant to the latter objection but not to the former, for whether $h$ is a heap depends on its physical properties, not on the use of a word. Nevertheless, the two objections spring from the same source, and raise similar issues. For simplicity, the focus will be on the first objection. After all, if it is unobjectionable for $h$ to be a heap, then it is equally unobjectionable for the word 'heap' to apply to $h$, given that the word 'heap' applies to all heaps.

Suppose that the result of subtracting one grain from $h$ is a non-heap $h^-$, which is also a borderline case. It may further be asked what the relevant difference is between $h$ and $h^-$, which makes the difference between a heap and a non-heap. Presumably, if $X$ makes $h$ a heap, and $Y$ makes $h^-$ a non-heap, then the relevant difference is the difference between $X$ and $Y$. Thus the epistemic view can satisfactorily answer the question 'What makes the relevant difference between $h$ and $h^-$?' if and only if it can satisfactorily answer the questions 'What makes $h$ a heap?' and 'What makes $h^-$ a non-heap?'. Moreover, the question 'What makes $h^-$ a non-heap?' raises the same theoretical issues as does the question 'What makes $h$ a heap?'. It is therefore sufficient to focus on the latter question as an objection to the epistemic view.

The most austere reply to the objector is that what makes $h$ a heap is simply the fact that $h$ is a heap. In answer to the semantic objection,