

Vagueness and the Ontology of Art

A Vagueza e a Ontologia da Arte

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Abstract: Vagueness and the ontology of art are both thorny issues. Although a lot of original work has been conducted in the XXth century in the domain of the ontology of art, trying to clarify, the nature of a work of art, its conditions of identity and individuation, and the status of aesthetic properties, there has also been some suspicion about the relevance of such ontological reflexions which seem to take us too far away from aesthetic experiences, artistic practices and the works themselves. As far as vagueness is concerned, it is often viewed as a mere epistemic or semantic notion, and the claim that there might be vague objects, namely ontic vagueness, is very seldom taken as a serious option¹.

However, if the apparent lack of boundaries, whatever its sources, is characteristic of vagueness, art would seem to be, *prima facie*, one of the domains that might be most hospitable to it. But if there are strong reasons against making sense of ontic vagueness, our *prima facie* intuitions may be just as hard to sustain here as anywhere else. Is there a way to avoid such conclusions? To view vagueness not only as an objective property but even as an irreducible constituent of reality, and as such, of the ontology of art itself? Following some original insights offered by Ch.S. Peirce, at the turn of the century, on the semiotic, epistemology and ontology of vagueness, I shall suggest that there is such a way, and that it may even help to favor some form of realism of vagueness in art.

Keywords: Vagueness. Ontology of vagueness. Art. Realism.

Resumo: *A vagueza e a ontologia da arte são duas questões espinhosas. Embora muito trabalho original tenha sido conduzido no século XX no domínio da ontologia da arte, tentando esclarecer a natureza de uma obra de arte, suas condições de identidade e individuação e o estatuto de propriedades teóricas, também houve alguma suspeita sobre a relevância dessas reflexões ontológicas que parecem nos levar muito longe de experiências estéticas, práticas artísticas e das próprias obras. No que tange à vagueza, ela é com frequência vista como uma mera noção semântica ou epistêmica, e a alega-*

¹ As M. DUMMETT once wrote, “the notion that things might actually *be* vague, as well as being vaguely described, is not properly intelligible” (1978, p. 260). However, he changed his mind subsequently, suggesting that the generalized thesis might express no more than a deep-rooted prejudice (1981, p. 440).

ção de que poderia haver objetos vagos, nomeadamente, vagueza ôntica, é muito raramente considerada como uma opção séria.²

Entretanto, se a aparente falta de fronteiras, quaisquer que sejam suas fontes, é característica de vagueza, a arte pareceria ser, prima facie, um dos domínios que poderiam ser mais hospitaleiros à vagueza. Mas se há fortes razões contra fazer a vagueza ôntica ter sentido, nossas intuições prima facie podem ser tão dificilmente sustentáveis aqui quanto em qualquer outro lugar. Há uma maneira de evitar tais conclusões? Ver a vagueza não somente como uma propriedade objetiva, mas também como um constituinte irredutível da realidade e, como tal, da ontologia da própria arte? Seguindo alguns insights originais oferecidos por Ch.S. Peirce, na virada do século XIX para o XX, sobre a semiótica, a epistemologia e a ontologia da vagueza, sugerirei que esse caminho existe, e que ele pode até mesmo ajudar a favorecer alguma forma de realismo da vagueza na arte.

Palavras-chave: *Vagueza. Ontologia da vagueza. Arte. Realismo.*

1. Sources of Vagueness

One problem about vagueness, as Katherine Hawley observes, is that to some questions, we do not know how to answer and “it does not seem that further information would help us answer the questions” (for ex: Are those curtains red or orange? Is Fred whose hair is thinning, bald yet? Is this molecule a part of me right now?). This situation arises because our concepts seem to have borderline cases: we do not know where to draw the line between the red things and the orange things, between the bald men and the non bald men, or between those things which are my parts and those which are not.

Indeed, it seems indeterminate whether the Welsh mountain Snowdon has a surface area of exactly 1.500 acres (indeterminacy of the *object* Snowdon), whether Fred is bald (indeterminacy not of Fred, but of the soritic predicate or *property*), and whether that molecule on Fred’s fingertip is a part of Fred (indeterminacy of *parthood*). But what is the source of all this vagueness? There are three main views of the matter (HAWLEY, 2001, p. 101-2). The first (or epistemic view) is that we talk precisely, but that we do not know exactly which things or which properties we are talking precisely about. The way in which we use the predicate “is bald” determines an exact cut-off point between the bald men and the non bald men – either Fred is bald or he is not bald – but we simply do not (perhaps cannot) know where that cut-off points to. According to this epistemic view of vagueness, our claims about persistence through time, or about Fred’s baldness, are either determinately true or determinately false even when we cannot know which (CARGILE, 1969; SORENSEN, 1988; WILLIAMSON, 1994).

² Como M. DUMMET escreveu certa vez: “a noção de que as coisas poderia efetivamente ser vagas, assim como são vagamente descritas, não é propriamente inteligível” (1978, p. 260). Entretanto, ele mudou de idéia subsequente, sugerindo que a tese generalizada só poderia expressar um preconceito profundamente enraizado (1980, p. 440).

The second view is that vagueness is a matter of indeterminacy which results from loose talk – we have not made it clear exactly which thing is Snowdon, exactly how well attached a molecule must be in order to be part of an organism. This is the semantic or linguistic view of vagueness (LEWIS, 1993). Vagueness is essentially a feature of our language or our predicates and names. These two conceptions are not equivalent, although Russell, for example, treats them as such, in so far as they both locate vagueness in our either linguistic or mental representation and not in reality itself, hence imply that the third view about vagueness, namely the ontological view, is false. As P. ENGEL has underlined (2003, p. 105-6), the second view (the semantic one) is more plausible than the first one: indeed it holds that vagueness comes from our indecision in the application of a predicate (bald), or a proper name (Paris), while the epistemic view holds that our vague predicates do have *in fact* precise limits of application, but which we are ignorant of. In other words, when I say that Fred is bald, my *use* of the term is vague, but the term itself is not vague, and has precise conditions of application (for example: 10 hairs), but which I ignore (and maybe ignore *necessarily*). So such a view seems to deny the reality of vagueness itself, contrary to the usual semantic views which hold that the vagueness surrounding many expressions of our ordinary language is a real phenomenon, and not an illusion of our understanding. Indeed the various theories that have been offered by different contemporary logicians and philosophers, in order to account for such a phenomenon, all try to show in what conditions vagueness can be eliminated; for example the theory of super-valuations held by Van FRAASSEN (1969) or Kit FINE (1975) tries to show how vague statements can be “precisified”; the theory of degrees of vagueness defended by Mark SAINSBURY (1988) supposes that there are assignable degrees which enable to assign truth values to vague statements. But none of these theories says that the phenomenon of semantic vagueness is not a real phenomenon. Contrary to this, the epistemic view seems to claim that it is not. Whatever way we use our words, they always designate their referent. Hence the epistemic view seems to reject even more radically the notion of vagueness in reality than the semantic view does, which admits, at least, that there is vagueness in the *meanings* of our words.

Yet we have to get to the third view in order to claim that at least some indeterminacy is due to the way the world is – for example, perhaps Snowdon just doesn't have sharp boundaries. This is the ontic view of vagueness (Van INWAGEN, 1988, 1990b; PARSONS; WOODRUFF, 1995).

2. Sources of Vagueness in Art

If we define vagueness, in a general way, as the apparent lack of sharp boundaries, there are many reasons why, and all kinds of ways in which, at first sight, the artistic domain should be a domain of predilection for revealing the importance of its presence, whatever its (semantic, epistemic, ontic) source is.

Even without subscribing, from the start, 1) to some kind of ectoplasmic or ineffabilist view of art stressing more the importance of aesthetic *experience* (often described as a continuous flow) than the importance of its objects, 2) or to some Platonist conception viewing aesthetic properties as formal or floating properties with no relation whatsoever to physico-phenomenal properties of the object, or again, more mildly, 3)

to a wholly intentional conception stressing more the *transcendent aim* of art than the real basis constituted by the objects themselves, whatever kinds of entities these might be, it is quite obvious that there are still many ways in which vagueness may be identified in the artistic domain. Let me just point out a few of them:

First of course, in terms of the *definition* of art itself. In order to avoid the thorny issues related to this, Goodman suggested that the question “When is Art,” should have priority over the question “What is Art?” (1978, chap. IV). Apart from more general reasons which have to do with an overall suspicion towards ontology as such, and especially towards any revival of some form or other of realism in art (in particular in a Platonic dressing), it is undeniable that such doubts have received some justification from the developments in the history of art itself and the appeal to some necessary re-definition of Art (Rosenberg) due to the growing difficulties in contemporary art to identify criteria enabling to decide what is and should be considered as art. It may be the case that we have now entered a time in the history of art where art has become so pluralistic and has diluted in so many areas and multi-varied ways and means of expression, that, to a certain extent, it resembles more an aesthetic vapor, gaz or perfume, as the French philosopher Yves Michaud has recently argued.³

Second, in terms of the definition of what a work of art is supposed to be: Are all works of art the same entities, whether they are a painting, a sculpture, or a piece of music? Depending on them belonging to the autographic or to the allographic arts? What kind of entity is a work of art: a type, a token, an event, a state of affairs? Is it real (Platonic), nominal, conceptual? Merely mental, conventional? What are the essential identity conditions of a work of art (ZEMACH, 1997, p. 147)? Are they basically semiotic (Goodman)? Historico-intentional (Levinson)? Evaluative (Zemach)? How are we going to trace the frontier between the original painting and its being infinitely reproduced or restored? Between the performance of a musical work at a concert and its recording on a CD? *Where* exactly does the work of art begin: when it is created, in the mind of the artist? When it is executed as an occurrence of a type or a structure, as an instantiated abstract particular (Margolis), a kind of action (Currie), a sort of event? But also *when* does it cease to simply exist as a work of art: is a Cezanne still a Cezanne when it serves as the door of a hen house? Or when it is closing time at the museum and that there are no more observers to watch the painting on the wall (Gilson)?

Thirdly, in terms of the status of aesthetic properties: are they objective or merely subjective projections? Is there a relation of supervenience between aesthetic, artistic properties and physical properties? And is such a relation a reducible or irreducible relation (LEVINSON, 1990, chap.7)?

Fourthly, in terms of the criteria that aesthetic judgment should rely on. Are there standards of taste? Is a sentimentalist or Kantian interpretation a sufficient warrant for the objective normativity of our judgements, or should we reintroduce some ancient standards such as beauty (ZANGWILL, 2001)?

As in other domains, at least when vagueness is viewed as a problem and not as an irreducible mystery which is part and parcel of what art and being a work of art or an aesthetic experience mean, several theories have been proposed to circumscribe such apparently unavoidable sceptical, relativistic or anti-realistic conclusions: as I suggested

³ See in particular MICHAUD (1999, p. 10, 28, 52, 55; 2003, passim).

earlier, some have accepted to bite the bullet from the start and to conclude from the difficulties just mentioned, that one should resist the temptation of trying to find a suitable definition of the nature of art or of the kind of entities it works with, or to look for identifiable aesthetic properties or criteria of aesthetic judgements. All the more so as artworks may be essentially viewed as cultural or institutional products (Dickie). Others have subscribed to a straightforward (though with variations) Platonist conception (Wolterstorff, Currie) or to a radically mentalistic (Collingwood) or nominalistic (Goodman) conception.

However varied such conceptions may be, they all have in common to underestimate, in my view, both what vagueness may mean as a virtuous or objective property, and how important it may be if one wishes to defend some form or other of realism in art. But in order to see how such ideas can work, by following some Peircian insights on those issues⁴, let us start by recalling what obstacles they should meet.

3. Problems with Ontic Vagueness and Vague Objects

According to HAWLEY, the fact that the notion of worldly vagueness seems almost incomprehensible, is partly “a result of an inadequate grasp of exactly what it would be for the world to be vague” (2001, p. 102). Yet, any indeterminate utterance owes its indeterminacy both to the way the extra linguistic world is, and to the way language is. I say “Fred is bald”, and my utterance lacks a determinate truth value. It is uncontroversial that the indeterminacy is in part due to the way Fred’s worldly head is. If Fred had been much more or much less hairy, then there would have been no indeterminacy in whether Fred was bald. Similarly it is uncontroversial that the indeterminacy is in part due to language: if “bald” had meant what “human” in fact means, then the utterance would have had a determinate truth value. So, intuitively, all indeterminacy seems to have a dual source, to be partly due to the meanings of words, partly due to semantic *indecision*, whilst some, perhaps, is not (HAWLEY, 2001, p. 103).

But is the world vague in its own right, or is vagueness always a matter of our loose talk or ignorance, a mismatch between the world and our representations of the world? Some believe that it makes no sense to claim that the world is vague in its own right. Yet, can one make sense of such a claim?⁵ In fact, as Williamson has noted, there are basic reasons why “the idea of vagueness in things themselves has attracted some and repelled others. The idea attracts, because it promises to allow a rather direct relation

⁴ It should be noted that there are few writings by Peirce on aesthetics. He recognized that he became interested rather late in aesthetics, especially when he saw its importance in the context of the normative sciences: then only, did he view logic as being founded on ethics, ethics itself being founded on aesthetics viewed (in a basically Kantian way) as the study of the admirable as such.

⁵ The examples are numerous: from the rebuilt ship of Theseus to Geach’s progressively disappearing whiskers of Tibbles the cat (GEACH, 1962; UNGER, 1980) or to the fuzzy boundaries between the city and its outskirts (see M. MORREAU, 2002; ENGEL, 2003). For the “orthodox” view (sustained first by RUSSELL, 1923), there are no vague objects. Words, thoughts, pictures and other representations are vague, but apart from them, the world is precise. For Russell, to think the world is vague is to mistake properties of

between our vague ordinary words and the facts we use them to describe, for example, between an utterance of “Blood is red” and the fact that the substance blood has the property of being red. The idea repels, because it promises to forbid a complete description of all the facts in precise scientific words. Opposed metaphysical proclivities underlie the ensuing debate” (1994, p. 248-9).

In the recent years it seems that there has been a growing metaphysical proclivity towards the idea that the world might not be perfectly precise and that vagueness might not, after all, be merely semantic or epistemic (TYE, 1990⁶; SAINSBURY, 1988⁷; TIERCELIN, 1991; 1992; HAWLEY, 2001; MORREAU, 2002⁸). Such a view seems to be intuitively right. We all see that the world is full of bald men, of children, of tall and small men, of mountains,

thoughts for properties of things, and he blamed Idealism for cultivating confused habits of thinking that can lead to this sort of mix-up. There is nothing as vagueness or precision in themselves: things are what they are and that's all. “Nothing is more or less what it is, or to a certain extent possessed of the properties which it possesses”.

⁶ For TYE, an object is vague iff “(a) it has borderline spatio-temporal parts and (b) there is no determinate fact of the matter about whether there are objects that are neither parts, borderline parts, nor non-parts of it” (1990, p. 536).

⁷ For SAINSBURY (1989), an object O is a vague object if and only if there is some second object such that it is indeterminate whether the second object is part of O. Like Tye, Sainsbury attributes ontic indeterminacy in boundaries to the object in question. Let us observe that ontic indeterminacy may be due to the property (for example, baldness, or colour of the object). HAWLEY has argued that there was no deep difference between both kinds of vaguenesses (2001, p. 106-9).

⁸ M. MORREAU notes that “it might seem simpler and better to suppose that, apart from representations in thought and language, all things are precise. But this orthodoxy is hard put to explain some of the phenomena. Take an ordinary material object, say Tibbles (I shall use ‘object’ broadly to cover organisms, cities and abstract entities, as well as ordinary material objects.) If vagueness is all a matter of representation then there is no vague cat. Instead there are many precise cat candidates that only differ around the edges by the odd whisker or hair. Since there is a cat, Tibbles, and since this orthodoxy leaves nothing else for her to be, one of these cat candidates must then be a cat. But if any is a cat then also the next one must be a cat, so small are the differences between them. So all of the cat candidates must be cats. The sensible idea that vagueness is all a matter of representation seems to entail that wherever there is a cat there are a thousand and one of them, all prowling about in lockstep or curled up together on the mat. But that is absurd. Cats and other ordinary things can come and go one at a time (cf. UNGER, 1980; GEACH, 1980, p. 215). Someone might try to contain the outbreak of cats by explaining that none of the candidates is a cat, but that is no levelheaded thing to do. It follows that there is no cat, not one, and by implication that there are no ordinary things at all in the world: no babies, no bath water, nothing (UNGER, 1979). One might instead explain that although there are many different candidates they are all one and the same cat (Peter Geach illustrates the notion of relative identity with his version of the problem of the many cats). Or that just one of them is a cat but there is no saying which, or that although all the candidates are different cats this is no matter since, so very similar, they are almost one and the same cat (LEWIS, 1993). These explanations do not fly in the face of commonsense; but there are many of them and none is obviously right. One starts to wonder, with all of this explaining away that orthodoxy has to do, whether the hypothesis that ordinary objects are vague might square up better with sensible ideas about what there is in the world.”

deserts and islands, all of which, at first sight do not seem to be particularly precise.

Let us take the case of a mountain such as the Mount Blanc: it seems obvious that there is no sharp division line between the matter composing the Mount Blanc and the matter outside it. The borders of the Mount Blanc are fuzzy. Some molecules are inside the Mount Blanc, some are outside. But some have an indefinite status. There seems to be no fact of the matter allowing us to decide whether they are inside or outside. In that sense, we are tempted to say that the Mount Blanc is a vague object. Such intuitions can be extended to some abstract objects. Let us consider the set of tall men. Those who are more than one hundred and ten centimeters are surely members of that set, but surely not those who are less than one hundred and sixty five centimeters. Intuitively, some are borderline members, which means that it is false to assert that it is true that some men are neither members nor borderline members, nor non members. But just as well, it seems erroneous to claim that it is false that such men exist: intuitively, it is not true that the dividing lines between each category are precise.

Finally, it seems even more obvious to admit that certain objects are vague because they have some vague properties, known since Antiquity as producing sorites-paradoxes, involving vague predicates (ENGEL, 1989, p. 258). The megaric sorite is well known: if you take a grain of corn from a heap, it does not cease to be a heap, nor if you take away two or three and so on. But (*sorite of decomposition*) can one grain make it the case that one no longer has a heap? Or (*sorite of composition*) from how many grains does one have a heap, from how many seconds of life is one an adult etc.? This leads to such paradoxes as the following:

- (1) A man with no hair on his head is bald;
- (2) For any number n , if a man with n hair is bald, then a man with $n+1$ hair is bald, Hence (3) a man with a million hair on his head is bald.

The conclusion is derived from the premisses by a series of applications of the *modus ponens* (if p then q , p , hence q). From true premisses, one seems then to conclude to something false, while following a valid rule of inference. This is why soritic predicates seem to be incoherent. But are such predicates really incoherent? Or is it possible to assign to them satisfactory conditions of reference? Whatever answer one adopts, most philosophers have tended to consider that vagueness was mainly a question of semantics or of our epistemic limitations, and not due to some correspondence that might exist between our predicates and some real properties in the world.

One of the most frequent arguments raised against the intelligibility of the thesis according to which there might be vague objects has been, beside the soritic arguments, the *identity argument* due to Gareth EVANS (1978) and, under another form, to Nathan SALMON (1982). Indeed, for many objects, the identity conditions seem to be ill defined. Does a chair cease to be a chair if it loses one of its legs? Is a man endowed with a new brain and a new body still identical with the original one? And, as we saw, the examples are numerous in case of works of art. Identity seems no longer absolute, but relative or indeterminate.⁹

⁹ The stress put on vagueness linked with the identity relation has been particularly important, as WILLIAMSON notes (1994, p. 252): "Derek Parfit, for example, took it to be uncontroversial that a pair of nations, or of machines, might be neither determinately identical nor determinately distinct (1971, 1984, p. 238-41). In a similar vein, KRIPKE wrote of cases

Because we are unable to determine in an exact way, even by arbitrary stipulations, when exactly a table, which has been diminished, molecule by molecule, ceases to be a table and is no longer but a piece of wood, some philosophers have concluded that objects simply do not exist (UNGER, 1979). But what is central to Evans and Salmon's argument is that they object to the idea that identity (and not merely the statements we make in order to assert it) might be a vague relation. Indeed if identity is vague, we must give up Leibniz's Law.¹⁰

Although different versions vary in detail, the main idea in the argument is indeed simple. Suppose that it is indeterminate whether $x = y$. Thus it is not determinate that $x = y$. But it is determinate that $x = x$. So x has a property that y lacks: the property one has in being such that it is determinate that $x =$ one. Now identity is governed by Leibniz's law: if $x = y$, then every property of x is a property of y . Thus it is not the case that $x = y$. This seems to undercut the initial supposition that it is indeterminate whether $x = y$. We began by assuming the question "Is x y ?" to have no right answer, but this assumption seems to yield an answer to the question: "No". How then can it be indeterminate whether $x = y$ (WILLIAMSON, 1994, p. 253)?

Since then, the Evans-Salmon argument has provoked a large body of discussion.¹¹ One of the most frequent objections addressed to Evans from the defenders of vague objects was that he relies on a controversial conception of *the reference of singular terms*, treating them as genuinely referential terms (or rigid designators). Now, as M. TYE for example objected, one can easily view each of the singular terms on each side of the identity sign as being itself vague. In which case, the vagueness of " a " or of " b " in " $a = b$ " does not require " $a = b$ " to be indefinite in truth value (i.e. that it be neither true nor false, an incoherent (according to Evans) consequence of his argument). Take, for example, the name "Everest" and suppose that " m " is a name for a more precise mountain that differs from Everest only in that it lacks certain chunks of matter that are indefinite

where 'the identity relation is vague': for example, where parts of a table are replaced (1972, p. 345, n. 18). On such views, one may single out a particular object x , and a particular object y , yet it may be just vague whether x is y ."

¹⁰ Evans's derivation is the following: Let us denote the truth value of a sentence " $a - b$ " by an indeterminacy operator " ∇ ". Then we have: (1) $\nabla (a = b)$

(1) reports a fact about b which may be expressed in assigning it the property " $\hat{y} [\nabla (y = a)]$ ":

(2) $\hat{y} [\nabla (y = a)] b$. But we have

(3) $\sim \nabla (a = a)$ hence:

(4) $\sim \hat{y} [\nabla (y = a)] a$.

Now, by Leibniz's law, one can derive from (2) and (4):

(5) $\sim (a = b)$ which contradicts the original hypothesis, i.e. that the identity statement " $a = b$ " had an indeterminate truth value (NOORIAN 1982). Contrary to Evans, Salmon does not use an indeterminacy operator, but notes that if identity is vague, reflexivity no longer holds: now an object cannot be vaguely identical with itself.

¹¹ As WILLIAMSON notes, "Evans began his note by mentioning the view that "the world itself might be vague". He did not claim it to be a consequence of this view that matters of identity in particular are vague; someone might hold that the world is vague in some respects, but not in respect of matters of identity. However, Evans's choice of title does suggest the claim that x is a vague object if and only if there is an object y such that it is indeterminate whether $x = y$. Moreover, those who think that the world is vague may do

constituents of Everest. Then the statement “ $m = \text{Everest}$ ” is vague since “Everest” is vague (as also is “ m ” unless it names an object that is completely precise). But “ $m = \text{Everest}$ ” is not indefinite in truth-value. Rather, it is false (TYE, 1990, p. 556). But in order to counter the Evans-Salmon argument, it can be argued that the existence of vague objects in no way implies vagueness in the identity relation. Such is the view defended by M. SAINSBURY (1989): let us imagine an Everest prime, which would be a mountain that just after some cataclysm would occupy about the same place as Everest, but would be made of a wholly different matter and let us suppose that someone considers that the existence of Everest prime verifies the individuating vagueness of Everest. This will not prevent him to continue to admit that there is a precise object such as the Everest and a precise object such as Everest prime which are distinct, and that there is a precise object such as the Everest and a precise object such as Everest prime which are identical. Hence, the fact that Everest and Everest prime are such that the question of their identity is vague does not establish vagueness in the identity relation. So the slogan should be: vague entities without vague identity.

As K. Hawley and M. Morreau have recently shown, such analyses may in fact be extended to any notion of parthood (modal or temporal or mereological parts). Morreau, for example, suggests to say that some objects are vague because they have some of their parts vaguely. This does not hold for chunks of matter (such as the molecule soap progressively melting in my bath tub or the whisker of the cat) but for such *functional* parts as the tail or the head of the cat which are irreducible components of what makes an organism the organism it is. If such an argument were correct, it would suggest that vague objects are essentially vague because some of their relations, namely here, the relation from part to whole, are vague, whereas others (that of identity) are not (ENGEL, 2003, p. 114).¹²

so *because* they think that some matters of identity are vague. Thus discussion of whether the world may be vague has come to centre on the Evans-Salmon argument. The specific proposition that for some objects x and y it is indeterminate whether $x = y$ is rather more tractable than the general proposition that the world is vague, and the formal structure of the argument is something definite to work on” (1994, p. 253). One point soon came clear. The argument does not show, and was not intended to show, that identity *statements* cannot be indeterminate in truth value. In particular, “it leaves open the possibility of indeterminacy in whether two names refer to the same object. Arguably, such a situation can be set up if any statement at all is indeterminate in truth-value. For if it is indeterminate whether A, we can stipulate that the name “Pardon” refers to London unless A, in which case it refers to Paris. But then the identity statement “Paris = Pardon” will be indeterminate in truth-value, for it is equivalent to “A” [...] Evans and Salmon aimed their arguments specifically against indeterminate identity, taken as implicit in vague identity. However, neither of them specified an overall framework for the handling of indeterminacy” (*ibid.*, p. 253-4).

¹² See also WILLIAMSON (1994, p. 256): “If objects can have fuzzy spatial boundaries, surely they can have fuzzy temporal, modal or mereological boundaries too. When did Europe begin to exist? Under what counterfactual circumstances would it still have existed? Which cities are parts of Europe? Each of these questions might be taken to concern a particular object, Europe, yet to have no determinate answer. In no case does this view entail the possibility of a pair of objects concerning which it is indeterminate whether they are identical.”

Although such views seem to me to be on the right track in order to identify what may be at the source of ontic vagueness, I am still inclined to think, as I wrote in a previous paper (TIERCELIN, 1991), that they suffer from deep metaphysical presuppositions: in particular, Evans's argument presupposes an analysis of the identity relation which relies heavily on a substantialist conception of objects which can have but a definite reference. Now, even if Tye objects to such a view, it is to oppose to it the view that singular terms can be vague. Which seems to grant, while previously arguing that non conceptual vagueness cannot be analyzed in terms of conceptual vagueness, that vagueness is finally not proper to things but to our statements.¹³ More generally, *some* ontology is always presupposed, as well as certain relations between logic and ontology. And more seriously, no precise analysis is provided of what it might mean for an *object* itself to be vague. Now, even if certain definitions are proposed of what one might mean by a vague, concrete or abstract object, either it is taken for granted, that a concrete object can be understood as a *physical* object (TYE, 1990, p. 535), which is far from obvious¹⁴, or vague objects are principally opposed to precise objects and to the

¹³ This explains why a good part of the discussions is then devoted to the question whether it is better to choose such and such "supervaluationist" (FINE, 1975) or "truth-value gaps" logic in order to avoid the incoherence that might result from the presence of vagueness. For more recent objections to Tye's view, see K. HAWLEY (2001, p. 108-9). Hawley thinks in particular that Tye is victim of the "standard approach" consisting of distinguishing "between ontic indeterminacy in boundaries and ontic indeterminacy in other respects. But ontic indeterminacy in whether something has only a few borderline spatio-temporal parts cannot neatly be classified on one side or the other of the distinction. Once we appreciate that ontic indeterminacy is simply indeterminacy without semantic indecision, we can give up trying to distinguish between boundary indeterminacy and other indeterminacy between vague objects and vague properties. If there can be ontic indeterminacy, then some objects are indeterminate with respect to what parts they have, other objects are indeterminate with respect to what they are parts of, and others are indeterminate in other respects, in colour, or baldness, etc. There is no deep distinction between objects of these three kinds, and indeed, we should never have expected there to be. For what else could it be for an object to be vague except that it be indeterminate whether it has a certain property, or indeterminate whether it bears a certain relation to a certain other object? And what else could it be for a property or relation to be vague except that it be indeterminate whether that property or relation is instantiated by certain objects?"

¹⁴ Cf. B. STROUD (1987). As I have shown in TIERCELIN (1991, p. 31 *sq.*), there are many reasons for being skeptical about the right definition of what a physical object might be, as a *physical* object, not only in so far as the frontier between what is strictly physical and strictly mental is hard to draw, but also because it is less obvious to say to day than it might have been in the XVIIth century, what the primary qualities of a physical object consist in, or what a "physical" property itself means. Should one count "colour" as part of its definition or not? Is it possible to reduce the concept of "physical object" to what physical sciences tell us about it? What then about such properties as colour, sensory and phenomenal properties, to say nothing of aesthetic properties? Are we going to reject them from our account of the "physical world"? Peirce had a lot to say on these issues and in particular showed how difficult it was to account for the *irreducibility* of some categorial aspects of the phenomenon and at the same time of their *unity* within experience. This may explain why, in particular, he refused to draw too sharp a frontier between the physical and the mental sides of things (CP 6.277) and considered that he knew "no facts which prove that there is never the least vagueness in the immediate sensation" (CP 3.93).

fact that they do not obey the laws of classical logic (*ibid.*, p. 535-6). But surely there is more to the concept of vague object than this,¹⁵ and it should be handled carefully.

In the next section, I shall suggest that Ch.S. Peirce did realize an amazing job trying to clarify such issues. And although it is impossible to give the full detail of his insights, I shall stress what are, in my opinion, the most enlightening ones, especially in terms of what objective vagueness in art may mean, and of what a program for a realism of vagueness in aesthetics might amount to.

4. Peirce's Insights on the Logic, Epistemology and Ontology of Vagueness

As HOOKWAY has underlined (2000, p. 137, 149), Peirce always considered vagueness as a "virtue."¹⁶ And he complained that "logicians have been at fault in giving Vagueness the go-by, so far as not even to analyse it" (CP 5.446).¹⁷ He denied that vagueness was a "defect in thinking or knowledge" and insisted that it "is no more to be done away with in the world of logic, than friction in mechanics" (CP 4. 344; 4. 512). Not only did he claim that vagueness was objective (and not merely logical or epistemic), which he showed both in his Logic of Vagueness and in his fallibilistic epistemology and synechistic and tychistic scientific metaphysics, but through a sophisticated categorical analysis owing much to the medievals (Duns Scotus in particular), he also claimed that reality itself is irreducibly vague and general, thus developing a very sophisticated realism of vagueness.

¹⁵ It should be noted that Arthur BURKS, who wrote illuminating papers on Peirce's views on logic and on abduction, in particular, was one of the few philosophers (in 1946) who showed an awareness of the importance of vagueness and of treating it according to such serious lines. He held that "an empiricist cannot consistently hold to the view that all universals embodied in the real world are precise universals" (1946, p. 483) and took this to be a consideration against the view that all universals embodied in the real world are precise, rather than against empiricism. Burks explicitly raised the possibility that our vague concepts might represent vague universals, participation in which is a matter of degree (this has been noted by WILLIAMSON (1994, p. 251-2) who suggests, however, that vagueness is much less closely related to matters of degree than is often supposed, though he grants that "one can ask related questions. Can it be indeterminate whether a given object has a given property? If so, can it be indeterminate whether it is indeterminate whether the object has the property?" (1994, p. 252). John BOLER, in his remarkable book on Peirce's relation to Scotus (1963), also stressed the importance of Peirce's views, although he did not relate them to the particular problem of *vagueness* itself.

¹⁶ He also notes that "in Wittgenstein, Ramsey, and Peirce, there seem to be connections between a readiness to take vagueness seriously, a "pragmatist" perspective upon issues of meaning, and some distinctive views of the nature or role of formal logic." Hence for pragmatists, "vagueness is not an imperfection". See for example RAMSEY who accused the *Tractatus* of "scholasticism, the essence of which is treating what is vague as if it were precise and trying to fit it into an exact logical category" (1931, p. 155). Elsewhere, he described the "essence of pragmatism": "the meaning of a sentence is to be defined by reference to the actions to which asserting it would lead, or, more vaguely still, by its possible causal effects" (1978, p. 57; 1931, p. 155).

¹⁷ All references are from PEIRCE ([1931-58] CP, cited by volume and paragraph number) or PEIRCE ([1982] W) or PEIRCE ([1976] NEM), or from PEIRCE ([1967] Ms).

For Peirce, not only is vagueness not an imperfection, but it is, to a certain extent, a perfection in itself. But in what respect and to what extent?

4.1. The Logico-semiotical and Epistemological Aspects of Vagueness

Let us start by Peirce's main insights in terms of the semantic and epistemological aspects of vagueness.¹⁸ By Logic of Vagueness are usually meant today inquiries made outside the field of classical logic in order to build multi-valued logics. Such inquiries are most often concerned with the vagueness surrounding ordinary language and by the necessity to appeal to some non standard logic in order to account for the paradoxes arising from vague predicates. Therefore such a logic is intended as an analysis of the conditions of production and determination of meaning.

Peirce aims at something rather different: although he himself made inquiries towards a triadic logic, and was interested in the problems related to the semantics of vagueness surrounding ordinary language, his basic project deals first with the specific semiotic as well as ontological conception he has of logic¹⁹ and presents itself as a general theory of the vagueness affecting signs and symbols in particular.²⁰ As such, it is not confined to a theory of vague concepts or of linguistic terms (CP 1.559). Now symbols or "indeterminate general signs" are only signs because there is a rule, a habit, a disposition or a convention to interpret them or to use them as such: hence the logic of vagueness has to elucidate the rules and habits that govern the production of symbols²¹. It is also intended as a *formal* logic, obeying the rules and norms that govern inference, and accordingly, bivalence, contradiction and excluded middle.

A sign or symbol has meaning only within the propositional context (in fact in the assertive context) in which it is inserted. (CP 4.583; cf. CP 4.56, 551). In that respect, thought, being a sign, is no exception to that rule: "Thought must have *some* possible interpretation for some possible interpreter", wherein lies the very being of its being (CP 4.6). (In other words, its dialogical character [Ms 931, CP 5.257, 421].)²² Such an

¹⁸ For a more detailed presentation, see TIERCELIN (1989; 1993, chap. V, p. 258-334).

¹⁹ I have developed that theme in TIERCELIN (1985, p. 229-50), and in a more detailed way in TIERCELIN (1993, p. 41-55, 262-75).

²⁰ cf. J. BROCK (1975; 1979). See also M. NADIN (1980).

²¹ "A symbol is a sign, which is constituted a sign merely or mainly by the fact that it is used and understood as such, whether the habit is natural or conventional, and without regard to the motives which originally governed its selection" (CP 2.307, 1901; cf. CP 4.531).

²² As HOOKWAY insisted on (2000, P. 141 *sq.*), contrary to most views, according to Peirce, "the fundamental semantic relation is triadic. A name denotes an object only by being *interpreted* as denoting the object; a sentence expresses a proposition only by being understood or interpreted as expressing it. In general, something is meaningful by virtue of having the power to enforce a particular interpretation; and the relation between a sign (linguistic expression or thought) and its "object" is mediated through an interpreting thought or utterance. In consequence, we can understand the contents of thoughts only by taking into account their interpretation in subsequent thoughts or their expression in utterances; and we can understand the meanings of utterances only by examining their interpretation through the thoughts and utterances of those who attend them."

ethical dimension of logic is important: an assertion, for Peirce, is the symbol which articulates the iconic elements (*i.e.* the elements which have some formal resemblance with the object) and the indexical elements (*i.e.* the elements which have some physical resemblance with the object) of the proposition. It is upon the symbol that the whole weight of assertion bears.²³ But an assertion has no meaning except through some designation that shows whether one refers to the real universe or what universe of fiction it is about (CP 8.368). This explains also how important the *indexical* element of the proposition is. An assertion is an act in which the speaker addresses a listener, formulates a propositional symbol and assumes some responsibility concerning the truth of that symbol.²⁴ All this presupposes on both parts that they have a certain competence and that they partake to a community of ideals and aims of speech. Both want to communicate, to learn and to know, *i.e.* to try and suppress all kinds of ambiguity and imprecision that might creep into the rational process and break communication.

But for Peirce, logic is also inseparable from *ontology*;²⁵ therefore, any account of vagueness will never be dealt with as such. Together with the general and the individual, vagueness is indeed, but one of the three terms that are brought forth through the categorial or phaneroscopic analysis, underlining the presence of three irreducible categories: *Firstness* or quality, spontaneity, vague possibility, *Secondness*, or reaction, individual existence, and *Thirdness*, the category of intelligence, mediation, generality and intentionality. Moreover, vagueness is merely one, together with the general, of the two figures of the indeterminate, both of which are opposed to the determinate.²⁶ Thus, as J. Brock has underlined, Peirce's Logic of vagueness involves at least a theory of communication, a theory of the norms that govern communication, a theory of propositional symbols, a theory of truth, of meaning, of belief, and of knowledge and

²³ "Any symbol involves an assertion, at least rudimentary" (CP 2.34). See BROCK (1981); TIERCELIN (1993, p. 281-305).

²⁴ Thus, any assertion implies, from the part of the speaker, that he believes or knows what he asserts and that he intends to convey the same belief and the same knowledge to his listener. Hence it is first of all the speaker who has the main responsibility: it is his task to eliminate any imprecision or ambiguity that might be an obstacle to communication. Which involves, on the utterer's part, "a voluntary self-subjection to penalties" in the event that the proposition turns out to be false (Ms 517). And Peirce goes so far as to say that such penalties are comparable to the legal penalties associated with making a false statement under oath (Ms 517; NEM IV: 249).

²⁵ This is, as Peirce reminds us, an idea present in Aristotle, Kant or Leibniz, for whom, logical principles were not "only regulatively valid" but should be taken as "truths of being" (CP 1.487; 7.480; 8.113). Confessing that he belongs to that part of the philosophical world "whose unlucky convictions force them to base metaphysics upon formal logic" (NEM IV: 167), Peirce himself thought that if one wished to handle the problem of universals correctly, one should start from logic. It is the only way, he claimed, to defeat nominalism (CP 4.1): "The question of realism and nominalism, which means the question how far real facts are analogous to logical relations and why, is a very serious one, which has to be carefully and deliberately studied, and not decided offhand, and not decided on the ground that one or another answer to it is inconceivable" (CP 4.68).

²⁶ Thus, Peirce's project is a general theory of the various forms and relations that the indeterminate and the determinate may legitimately take within the very wide framework provided in particular by that part of Logic which is devoted to Speculative Grammar

one may say, a theory of reality.²⁷ And the problem one has to face is the following: how is one to reach a correct theory of assertion, that enables one to progress towards knowledge and truth, while taking into account the fact that our knowledge is entirely wrapped into signs which, by nature, are utterly indeterminate, for “honest people, when not joking, intend to make the meaning of their words determinate, so that there shall be no latitude of interpretation at all” (CP 5.447)? But, on the other hand, “no sign is absolutely precise”. Hence, how do we – and can we – resolve such difficulties? Such is the challenge for a Logic or (semantic) of Vagueness.

How does Peirce handle the difficulties? Around the following ideas which should deserve a detailed treatment but which I shall just summarize here:

Any symbol, as a sign, is capable of determining a further symbol which interprets it or translates it: so that it is at least potentially indeterminate. To that leading idea of the logic of vagueness, Peirce adds a twofold thesis: *no term is absolutely indeterminate; no term is absolutely determinate*.²⁸ The principles that are proper to Speculative

(identified with some *Erkenntnistheorie* or epistemology) which deals with the formal conditions of symbols that have a meaning (CP 1.559; 4.116). Such a normative character of Grammar is decisive. Indeed, its task is to establish what must be true of the *representamina* that are being used by a Scientific Intelligence, – *i.e.* an intelligence which is incapable of intuition, in accordance with the conclusions established by the articles published in 1868 in *The Journal of Speculative Philosophy* (CP 5.213-357; W2: 193-272), in order for them to embody any meaning and to assert anything whatsoever (CP 2.229; 2. 206).

²⁷ BROCK (1975, p. 129).

²⁸ An absolutely indeterminate sign would designate a property which would have to be shared by *all* things. Hence we can form no conception of such a property (CP 1.548; L. 224). Indeed, of the main principles of semiotic is such that any symbol must have an interpretant, hence, in Peirce’s jargon, some informed or essential *depth*. Otherwise, it cannot take part into communication or dialogue, for it is not capable of being interpreted. Besides, for a term to be said to be absolutely indeterminate, one should be able to know all the possible predicates with respect to which it would be indeterminate. But such a list is infinite. Hence, if we stick to the level of the cognizable, *any term is at least potentially determinate*. As Jarrett BROCK (1979, p. 43) has accurately pointed out, “what is here being ruled out as unintelligible is the notion of an *absolutely* simple, unanalyzable, indefinable and hence, inexplicable, general term (the stock and trade of traditional Cartesian Philosophy)”. We have here, in a nutshell, Peirce’s total rejection of the “salad of Cartesianism”. Second, it is also from Peirce’s anti-intuitionism and anti-reductionism that the arguments in favor of the thesis according to which *no term is absolutely determinate* proceed: A concept determined in all respects is as fictional as a definite (precise) concept in all respects (CP 7.208). What would such an absolute determinate term amount to? A logical atom “incapable of logical division” (CP 3.93). Now, a term “however determinate, may be made more determinate still”. For example, the second Philip of Macedon is always capable of logical division into Philip sober and Philip drunk (CP 3.93). An interpreter has always the right to consider that Philip was a different man in different times and places. A term such as Philip of Macedon may thus always be considered as a general term covering the different states of Philip. Such an analysis is one of the most constant motives in Peirce’s theory of knowledge, and one of its main direct consequences is Peirce’s admission of real universals or general terms: since no percept is entirely determinate, since no knowledge is entirely determinate, generals must have a real existence. Such is the conclusion which is drawn by Peirce in his 1868 articles, which are directed against Cartesianism, and which are widely developed in his 1871 Review of Fraser’s edition of G. Berkeley (CP 8.7-38; W2: 462-87). On all this, see (BROCK, 1975, p. 129).

Grammar together with the relations between the indeterminate and the determinate impose a certain treatment of vagueness, according as it appears at the level of *breadth* (broadly speaking: reference) or at the level of *depth* (broadly speaking: meaning), but also with regard to the *general* on the one hand, and to the possible forms of the *determinate*, on the other hand; and finally according to the situation which is involved in the act of assertion.

In terms of breadth, first: and in so far as they are both figures of the indeterminate, and despite what opposes them, vagueness and general are, from a formal point of view “on a par” (CP 5.506). Vagueness is “the antithetical analogue of generality” (CP 5.505):

A sign is objectively *general*, in so far as, leaving its effective interpretation indeterminate, it surrenders to the interpreter the right of completing the determination for himself. “Man is mortal.” “What man?” “Any man you like.” A sign is objectively *vague* in so far as, leaving its interpretation more or less indeterminate, it reserves for some other possible sign or experience the function of completing the determination. “This month”, says the almanac-oracle, “a great event is to happen”. “What event?” “Oh, we shall see. The almanac does not say that.” (CP 5.505)²⁹

Thus, it is the *context* or the situation of assertion that gives the rules of the right functioning of vagueness and generality. But the situation is far from being edenic: the question is not so much to describe a situation of communication or of dialogue between speakers that care about one another as to provide the *rules* of a game.³⁰ What is

²⁹ “A sign (under which designation I place every kind of thought, and not alone external signs), that is in any respect objectively indeterminate (i.e. whose object is undetermined by the sign itself) is objectively *general* in so far as it extends to the interpreter the privilege of carrying its determination further. Example: “Man is mortal”. To the question, “What man?” the reply is that the proposition explicitly leaves it to you its assertion to what man or men you will” (cf. CP 2.357). “A sign that is objectively indeterminate in any respect is objectively *vague* in so far as it reserves further determination to be made in some other conceivable sign, or at least does not appoint the interpreter as its deputy in this office. Example: “A man whom I could mention seems a little conceited.” The *suggestion* here is that the man in view is the person addressed; but the utterer does not authorize such an interpretation or *any* other application of what she says. She can still say, if she likes, that she does *not* mean the person addressed. Every utterance naturally leaves the right of further exposition in the utterer; and therefore, in so far as a sign is indeterminate, it is vague, unless it is expressly or by a well-understood convention rendered general” (CP 5.447). But Peirce also gives the formal conditions that vagueness and generality obey respectively: “Perhaps a more scientific pair of definitions would be that anything is *general* in so far as the principle of excluded middle does not apply to it and is *vague* in so far as the principle of contradiction does not apply to it. Thus, although it is true that “Any proposition you please, *once you have determined its identity*, is either true or false”, yet, *so long as it remains indeterminate and so without identity*, it need neither be true that any proposition you please is true, nor that any proposition you please is false. So, likewise, while it is false that “a proposition *whose identity I have determined* is both true and false”, yet, until it is determinate, it may be true that a proposition is true and that a proposition is false” (CP 5.448).

³⁰ As Risto HILPINEN has pointed out, such analyses have much in common with the strategy adopted by Hintikka in his Game-Theoretical semantics (1982; 1995, p. 272-303). On the same topic see J. BROCK (1980).

indeed at stake here, is the communication of truth: the speaker must, one way or another, have his belief adopted by his listener (Ms 284).³¹ The speaker is a defender of his own position; as for the listener, it is his interest to try and detect a possible falsehood committed by the speaker, since “the affirmation of a proposition may determine a judgement to the same effect in the mind of the interpreter to his cost” (Ms 517; NEM IV: 249). Hence the utterer and the interpreter have opposite interests and attitudes with regard to the truth of any proposition asserted by the former,³² so difficult it is, as everybody knows, to give up one’s beliefs.³³ Indeed vagueness is on the side of the speaker; it is not linked with the very nature of the matter. It is due to the deliberate intention of the speaker.³⁴ If however, the speaker wants to convince, or to communicate an information, it is up to him to qualify vagueness. Note here: to qualify it does not mean to *eliminate* it. Nonetheless communication requires that indetermination should not be complete (otherwise it would be meaningless). What kinds of means are at our disposal if we want to communicate some information after all, and even in certain cases to “eliminate every attempt at interpretation”? Peirce here has several ways of answering this question:

First, vagueness can be removed if the speaker accepts to extend “to the interpreter the privilege of carrying its determination further” (CP 5.447). The assertion which was vague becomes general.³⁵ But the fact that the utterer leaves it to the interpreter to

³¹ See Ms 280; Ms 9: 3-4.

³² HILPINEN (1982, p. 185).

³³ This is why Peirce occasionally calls the interpreter of a proposition its “opponent” (e.g. in Ms 515). Indeed, all communication implies the mutual respect of a certain number of tacit assumptions, some agreement upon the aim of communication on both parts. This is why honest people when not joking, intend to make the meaning of their words determinate, and want to avoid any “latitude of interpretation” (CP 5.447). Which means that “the character of their meaning consists in the implications and non-implications of their words; and they intend to fix what is implied and what is not implied” (CP 5.447). Nevertheless, the necessarily asymmetrical situation which prevails between both speakers does not make the elimination of indetermination in all cases desirable. The speaker may have some interest in sticking to a certain fuzziness.

³⁴ “The phrase “a *certain* man” means that the determination which is left uncertain to the reader or auditor is nevertheless, or once, was, *certain* either to the utterer or to some other person” (CP 5.505, n. 1; cf. CP 3.94).

³⁵ The fact that a sign ceases to be vague by becoming general does not mean that we push the problem further, first, because “no sign can be at once vague and general in the same respect, since insofar as the right of determination is not distinctly extended to the interpreter it remains the right of the utterer” (CP 5.506). Second, because generality avoids an absolute indetermination, in so far as “a sign which should make its interpreter its deputy to determine its signification at its pleasure would signify anything, unless *nothing* be its significate” (CP 5.448, n. 1). Finally, and most importantly, the general does not introduce any absolute indetermination: for in that case we would have to accept that generality should be able to affect the depth or meaning of a term. Strictly speaking, this is impossible. A general term is, in fact, the product of a hypostatic abstraction, the operation by which we introduce abstract entities whose identification is done through the relationship which they have with something which is *familiar* to us. Cf. T. SHORT (1980, p. 322).

complete the determination of the implication, as when he says: “This being filthy, in every sense of that term”, does not mean that indeterminacy be lost in every sense: in fact the interpreter puts under the term “filthy” the general and usual properties which are conventionally attached to such a term. Here collateral information also helps the system of conventions to facilitate interpretation.³⁶

Once it is admitted that we have avoided the risk of absolute indetermination by transforming vagueness into generality, how can one be sure that generality actually involves a reference to an object or to reality? Here the role of indices is outstanding: but note that there is no individual which is absolutely determinate. Even if we pass from the *individuum vagum* to the *individuum signatum*, Phillip remains always divisible into Philip drunk and Philip sober. The difficulty can be solved in two ways, either by adopting a more or less determinate index (that is, a proper name or singular), or by contending oneself of an indeterminate or indefinite index, that is, an indeterminate indexical symbol which represents more than one singular object (Ms 283). Common nouns perform, most of the time, this function.³⁷

The context (or the pragmatic dimension) of an assertion is the second means invoked by Peirce to explain how an object of experience can be identified, besides its being singularized. Indeed “no general description can identify an object.”³⁸ Which means

³⁶ On collateral experience, see Ms 318 and CP 8.178. “Collateral” observations should be distinguished from “acquaintance with the system of signs”, which involves “previous acquaintance with what the sign denotes” (CP 8. 179).

³⁷ It is “important to understand that, whenever he makes a comparison between vagueness and quantification, the analogy he stresses is with *existential* quantification” (HOOKWAY, 2000, p. 147). Vagueness is unavoidable by reference to the semantics of singular terms (3.93; 5.448n). Whereas a proper name “denotes a unique individual the existence of which is well known both by the speaker and by the interpreter” (Ms 517, NEM IV: 243), a common name, although it functions as the subject of the proposition (and therefore as an index) remains indefinite (Ms 516). In what sense does an indeterminate index (which Peirce sometimes calls a “precept”) direct a speaker and an interpreter towards the proper way of finding a singular object or the index of a singular object, so that this object can function as the subject of an assertion? Peirce’s analysis here can be compared to Hintikka’s interpretation of quantifiers in game-theoretical semantics (HILPINEN, 1982, p. 185). A determinate index is indefinite only if the speaker is free to choose (through the selectors and the quantifiers) the object which the index is supposed to represent; that is, if he is free to give his interpretation of the assertion. An existential quantifier signals the choice of the speaker in the language game. A definite proposition can be considered as the choice made by the speaker of leaving no latitude of interpretation (Ms 515: 25). Since the choice of the object cannot be done simultaneously by the two interlocutors, every indeterminate index must be either individual (non general) or definite (non indefinite) (Ms 9, §2); on the other hand, “whichever of the two makes his choice of the object he is to choose, after the other has made his choice, is supposed to know what that choice was. This is an advantage to the defense or attack, as the case may be” (Ms 9, §3).

³⁸ “The common sense of the interpreter of the sign will assure him that the object must be one of a limited collection of objects. Suppose, for example, two Englishmen to meet in a continental railway carriage. The total number of subjects of which there is any appreciable probability that one will speak to the other perhaps does not exceed a million, and each

that the meaning of a concept does not consist in the abstract image or in the mental image to which it corresponds, but rather in the use, the method of the technique of action, what can be expected from it, or its aims. We have here much more than an introduction of pragmatic elements in the elucidation of meaning: in fact, the whole pragmaticist theory of meaning is involved, and together with it, the idea that any definition must go through the description and the exhibition of the rules, conventions and uses which the term implies.

Now in terms of vagueness in depth (or meaning), Peirce notes that it is irreducible and that we have no reason here to believe that it is an obstacle to knowledge and truth. The first form of vagueness comes from the real indeterminacy which is constitutively tied to our beliefs and habits:³⁹

To the question whether a certain newly found skeleton was the skeleton of a man rather than an anthropoid ape, the reply “Yes and no” might, in a certain sense, be justifiable. Namely, owing to our conception of what a man is having been formed without thinking of the possibility of such a creature as to which this skeleton belongs, the question really has no definite meaning. (Ms 596: 16)

Had I said his hair was red, that would not be quite “precise”, but a little “vague”, since there are shades of hair between sandy and red which I might one day call red while on another day I might say “No, that is reddish, but not red.” (Ms 48: 8, n. d.)

will have perhaps half that million not far below the surface of consciousness, so that each unit is ready to suggest itself. If one mentions Charles the Second, the other need not consider what Charles the Second is meant. It is no doubt the English Charles the Second. Charles the Second was a quite different man on different days; and it might be said that without further specification the subject is not identified. But the two Englishmen have no purpose of splitting hairs in their talk; and the latitude of interpretation which constitutes the indeterminacy of a sign must be understood as a latitude which might affect the achievement of a purpose. For two signs whose meanings are for all possible purposes equivalent are absolutely equivalent. This is, to be sure, rank pragmatism; for a purpose is an affection of action” (CP 5.448, n. 1). This is rank pragmatism indeed, if we bring this together with the famous Peircian maxim: “Consider what effects that might conceivably have practical bearings, we conceive the object of our conception to have. Then our conception of these effects is the whole of our conception of the object”.

³⁹ It is illustrated by the definition given in the *Baldwin Dictionary*: “*Vague in logic*. Indeterminate in intention A proposition is vague when there are possible states of things concerning which it is intrinsically uncertain whether, had they been contemplated by the speaker, he would have regarded them as excluded or allowed by the proposition. By intrinsically uncertain we mean not uncertain in consequence of any ignorance of the interpreter, but because the speaker’s habits of language were indeterminate; so that one day he would regard the propositions as excluding, another as admitting, those states of things. Yet, this must be understood to have reference to what might be deduced from a perfect knowledge of his state of mind; for it is precisely because these questions never did, or did not frequently present themselves, that his habit remained indeterminate” (V. II, p. 748).

In both cases, vagueness is tied to the way in which, for example, we usually refer to colours, that is through reference to colour charts or to paradigmatic cases (we do not learn any definition of colour), but through a *habit* or a usage contracted through those apprenticeships and which function as a rule or as a definition, and which, consequently, do not allow us to give an invariant answer to questions about colours.⁴⁰

But there is a second source of vagueness, in the second case, which is attached to the impossibility of a strict definition of the domains of application of the concept, because it is directly tied to ontology and to the hypothesis of the existence of the continuum. For if colour is a real continuum, then the possibility of borderline cases is ineliminable. Now this hypothesis is the one towards which Peirce constantly moves⁴¹. If colours form a continuum,⁴² it seems that one cannot reach a vocabulary of colours which would be so precisely defined that it would render border-line cases impossible. So in a way vagueness is a kind of ignorance, but a necessary ignorance due to the non discriminable character of concepts which are in fact distinct (WILLIAMSON, 1994, p. 257 sq; ENGEL, 2003, p. 116-7). However, to say that it is a product of our ignorance does not mean that it is not something real. Nor that we have no way, again, to handle the difficulty:

Suppose the chat of our Englishmen had fallen upon the colour of Charles II's hair. Now that colors are seen quite differently by different retinas is known. That the chromatic sense is much more varied than it is positively known to be is quite likely. It is very unlikely that either of the travellers is trained to observe colors or is a master of their nomenclature. But if one says that Charles II had dark auburn hair, the other will understand him quite precisely enough for all their possible purposes, and it will be a determinate predication. (CP 5.448, n. 1)

Vagueness here is tied to the fact that reality presents itself to us as a continuum: this is what explains, according to Peirce, the sorites paradoxes raised by border-line

⁴⁰ According to HOOKWAY, the distinctive pragmatist approach to semantic issues is evident in the style or argument used to answer, for ex. the question whether “a certain newly found skeleton was that of a skeleton of a man rather than an anthropoid ape”: “When Frege expresses doubts about the coherence of vague predicates, this is because he thinks that there are no precise laws of logic which explain their logical behaviour. When Peirce defends their coherence, this is through showing that they do not prevent our interpreting the utterances in which they occur: the focus is on the practice of interpretation, and upon how we can make them more precise through such a process” (2000, p. 148). “Distinctive of pragmatist accounts of meaning and understanding the tress upon the practice of interpretation and upon the respects in which this is sensitive to the goals which guide our activities, provides a perspective from which we can understand the role of language in our lives without feeling constrained to each for pristine logical structures which are somehow present in our ordinary assertions” (*ibid.*, p. 58).

⁴¹ In keeping with the synechistic hypothesis according to which “all that exists is continuous” (CP 1.172 ; cf. CP 6.116, 6.164, 4.121).

⁴² For instance in the sense of Kant's principle of affinity and continuity, which prescribes “that we move from one species to another through a constant increasing of diversity”, then the Kant-Peircean principle according to which there is a potentially infinite number of intermediaries is satisfied.

cases, limit-cases, or fuzzy sets⁴³. All this confirms that vagueness is “no more to be done away with in the world of logic than friction in mechanics” (CP 4.513): it is a universal real principle and not “a defect of our knowledge or of our thought” (CP 4.344).

4.2. The Ontological Aspects of Vagueness

So Peirce not only intended to show that there is objective vagueness, *i.e.* states of affairs whose application it is objectively impossible to determine. He also intended to hold that vagueness is real, *because reality itself is vague*. His logical project is thus inseparable from an ontological account of vagueness and from the elaboration of a realistic (though not Platonist)⁴⁴ position which takes vagueness as one of its central tenets.⁴⁵

⁴³ “*Indefiniteness* [...] consists in a sign leaving it doubtful [...] what its intended interpretation was [...] as to a great multitude or even a continuum of possible interpretations no two of which differ without the doubt extending to intermediate interpretations” (Ms 283, rejected p. 139; cf. CP 4.171-2). “Wherever degree of or any other possibility of continuous variation subsists, absolute precision is impossible” (CP 5.506).

⁴⁴ For Peirce, one of the most deep-rooted and crude misunderstanding lies in believing that the problem of universals has anything to do with “Platonic ideas” (CP 8.17) What does this mean? Contrary to what is often asserted today, when it comes to the realism-anti-realism issue about universals, Peirce clearly sees that the problem is not that of wondering whether there *exist* universals apart from our ideas or words. The alternative between *esse in anima* or *esse extra animam* is wrong. Universals are undoubtedly words or concepts: the real question is: are they only that? (CP 3.460). The real opposition between realists and nominalists lies thus in the question of the “*fundamentum universalitatis*” (CP 6.37). Any other conception is but a “caricature” of scholastic thought (CP 6.361; 1.27, n. 1). This is why, in Peirce’s view, it is most often incorrect to oppose metaphysical realism (or Platonism) and nominalism. Indeed, most nominalists are mere Platonists. Used as they are to admit as reals, singular existents only (CP 8.10; 5.470; 5.503), they come to figure that all that is real must have the same mode of reality as any other thing (CP 1.21; 2.115) and that “reality is something independent of the representative relation” (CP 5.315). Now – and we begin to come closer to what Peirce’s “scholastic realism” means –, when a scholastic realist claims that universals are real, he does not mean that they exist and that they are to be discovered like crabs under rocks. One must distinguish between reality and existence. It is the only way to avoid metaphysical figments: “In fact, a realist is simply one who knows no more recondite reality than that which is represented in a true representation” (CP 8.13). So there is indeed a “nominalistic Platonism” (CP 8.10) which consists in conceiving the existence of things “independent of all relation to the mind’s conception of it” (CP 8.13). On the contrary, scholastic realism refuses to introduce universal or singular entities that would be utterly independent of thought and signification: “The real is that which signifies something real” (CP 5.320). Hence it is impossible to get out from language and representation, as if one could come to simple, ultimate, unanalyzable elements. As early as 1868, Peirce has violently criticized any appeal to intuitions, sense-data, or foundationalisms of all kinds. For him, to criticize nominalism will mean first and foremost to refuse any such form of reductionism.

⁴⁵ On Peirce’s realism of vagueness and his position on metaphysics, see C. TIERCELIN (1991b) in which I have myself defended the possibility of vague objects and 1992.

Indeed Peirce's views on vagueness, as John Boler has superbly shown in his pioneering book on the subject, come from Peirce's reflexions on Duns Scotus's own elaborations of some intuitions by Avicenna.

1. The adoption of realism means that *vagueness* (viewed as indeterminacy as such, or the Metaphysical Common Nature in its state of irreducible indeterminacy) must be taken as real: for it is on that latter ground that realists and nominalists are mostly opposed (CP 5.453). To be a realist, one shall have to "get rid [...] of the Ockhamistic prejudice of political partizanship that in thought, in being, and in development, the indefinite is due to a degeneration from a primary state of perfect definiteness. The truth is rather on the side of the scholastic realist that the unsettled is the primal state, and that definiteness and determinateness, the two poles of settledness, are in the large, approximations, developmentally, epistemologically, and metaphysically" (CP 6.348). For Peirce, to be a "nominalist", one has only to "entertain the theory that all vagueness is due to a defect of cogitation or cognition" (CP 4.344).

2. But in order to get a full grasp of Peirce's realism, one should note the decisive influence of Duns Scotus on him and the reasons why, while calling himself a Scotistic realist, he also renounced to follow the Subtile Doctor on certain points on which he found him too moderate or too little scientific.⁴⁶ Briefly, for Peirce, to follow Duns Scotus is to admit certain metaphysical realities or formalities which are not reduced either to physical parts or to conventional names, since their real unity, if it is indeed discovered by the intellect, is not produced by it. Logical generality and real community have to be distinguished (CP 8.18). It is such indeterminacy of the *ens reale* (which in fact Duns Scotus had himself retained from Avicenna's reading) that retained Peirce's attention and which he took as one of the most important aspects of the Scotistic assessment of the reality of universals (5. 312).

3. The *quod quid est* which is previous to its ways of being (*equitas est equitas tantum*) and which is the proper subject for the metaphysician is yet in potency of determination, mid-way from the physicist who considers it in its concrete determinations and from the logician who considers it as determined to universality. Such are indeed the characteristics of real universality which Peirce saw operating in knowledge – "since no cognition of ours is absolutely determinate, generals must have a real existence" (CP 5.312) – in thought in general which expresses itself though signs, and in scientific progress (CP 1.341). Indeed, what a scientist or a mathematician is interested in an experiment, is not this or that piece of gold or acid; it is not the particular sample that the chemist is investigating, it is the molecular structure (CP 4.530), *i.e.* a certain nature which is in itself neither particular nor universal, neither particular because the singular case is but a contraction of that nature, nor universal because universality is not actual but potential, under the form of a predicable habit, disposition or tendency (CP 5.425).

4. But Peirce finally viewed Duns Scotus as too moderate and too close to the nominalists; for "real universality must not only be indeterminate in respect to the mind, it must be so *in re*" (CP 8.208) and "an absolutely determinate logical individual is impossible" (W2: 389-90).

⁴⁶ For more details on Peirce's Scotistic realism see BOLER (1963) and TIERCELIN (1999).

5. Contrary to Scotus's version, Peirce endorses an extreme form of scholasticism in which Laws (Dispositions and *Would-be*) – and not universals and particulars – are in the end, what the *real* universals are: this is revealed, in Peirce's view, by his logic of relatives, which has two effects: it shows the too narrow frame of the classical theory of the proposition. Relations are now seen as fundamental as qualities, and might very well constitute the essence of the object; the scholastic form is too static to reveal such a relational structure. Instead of looking for some qualitative essence from which the behavior of the thing could be derived, its essence is now identified with the sum of habits-dispositions it involves. The second effect of the logic of relatives is to stress, parallel to the mathematical discoveries made by Peirce at the same time, the central importance of continuity (CP 4.1; NEM.IV: 343).

Such discoveries are adapted to science, which is supposed to account of *real possibilities* or *would be* irreducible to actual individual events but extending to general kinds of experimental phenomena (CP 5.426)⁴⁷ and meant not as mere mental creations but as active principles of nature. All this commits one to “subscribe to the doctrine of a real modality, including real necessity and real possibility” (CP 5.457) which explains in Peirce's more evolved scientific realist metaphysics, the stress on the irreducible indeterminacy of the real at both ends, for not only is our tendency to generalize and to take habits, real (*synechism*), but vagueness itself (*firstness*), the element of spontaneity or of randomness which lies at the bottom of habit and which we can not verify, is real (*tychism* in Peirce's cosmology).⁴⁸ As a consequence, fallibilism is not, contrary to what is often said, inconsistent with Peirce's realism, but inseparable from it.⁴⁹

⁴⁷ This tendency to act “in a way describable in general terms upon every occasion (or upon a considerable proportion of the occasions) that may present itself as of a generally describable character” is what Peirce calls a “habit” (CP 5.538). It is not limited to human activity - see the “would-be” of the dice (CP 2.664). This is of considerable importance for Peirce's frequentist-dispositional theory of probability.

⁴⁸ This, incidentally helps to deal with what may appear as *prima facie* contradictions in Peirce's definition of reality: at times defined as the object of knowledge, or as the final opinion which the scientific community would reach, or as what is entirely independent of our thought (and not only of what such and such individual may think it is). But also, very often, reality is mainly for Peirce just a plausible empirical hypothesis: “What is reality? Perhaps there isn't any such thing at all. As I have repeatedly insisted, it is but a retrodution, a working hypothesis which we try, our one desperate forlorn hope of knowing anything. Again it may be, and it would seem very bold to hope for anything better, that the hypothesis of reality though it answers pretty well, does not perfectly correspond to what is” (NEM IV: 343-4).

⁴⁹ “If we think that some questions are never going to get settled, we ought to admit that our conception of nature as absolutely real is only partially correct. Still we shall have to be governed by it practically, because there is nothing to distinguish the unanswerable questions from the answerable ones, so that investigation will have to proceed as if all were answerable” (CP 8.43). It is here of course that vagueness comes more clearly into the picture. But to acknowledge that there is indeterminacy in our knowledge and in the world is not an invitation to laziness. If our language is irreducibly vague, and although there is no reason to complain about it and to replace it by an ideal language, we must not renounce looking after accuracy in our terms, even by using, when necessary, the most esoteric terminology. Similarly, the fact that most of our beliefs are indubitable does

5. Suggestions in Favor of a Modest Form of Realism of Vagueness in Art

Now in what respect might such Peircean insights be helpful to handle the various ways in which vagueness may pose problems in the domain of art, and even in order to defend some form of realism in aesthetics?

As far as the semantic and epistemic aspects of vagueness are concerned, I think we can meditate the following lessons:

5.1. Semantic Vagueness

Peirce grants that semantic vagueness is a real phenomenon and not an illusion of our understanding, a matter of indeterminacy which results from loose talk, a feature of our language, of our predicates and names. To say that vagueness is objective means that it affects depth (the indefinite in depth) or meaning, but to a certain extent also, breadth or reference. Even if it is eliminated, either because the speaker introduces indices, or because he transfers his right of determining to the interpreter, so that vagueness then becomes generality, in both cases, a certain form of irreducible indeterminacy remains. First, because indices are never totally determined, secondly, because generality is indeed a new form of the indeterminate. Therefore, in either case, the irreducibility of the third category – which is one of Peirce's main theses – exhibits the strength of its reality. Most often, philosophers or logicians analyze the problem of vagueness from the standpoint of a certain ideal of knowledge or formalization, in virtue of which what one should tend to reach is something *precise*.⁵⁰ The various processes of indexicalisation used by Peirce show in what respect such an idea was not utterly foreign to him. But, at the same time, he thought that there is some illusion in believing that one can eliminate indeterminacy simply by replacing it with determinacy, precision or individuality. In defining generality as the antithetical analogue of vagueness, Peirce has proposed the following insight: indeterminacy must not be considered, as such, as an obstacle to communication, knowledge or truth. On the contrary, it is an essential component of it. Generality is the indefinite series of interpretants (CP 1.339), the idea that knowledge is for ever open, the very manifestation of intelligence; since it is less the extension of an idea one already had than a progress in the definiteness of conceptions that one applies to known things (CP 2.422). To eliminate generality would thus amount to dreaming that one can reduce the meaning of the intelligence which is in things, which is illusory (CP 1.344-5).

not imply that we should not abandon them as soon as their falsity is revealed to us by experience. Finally, the fact that reality presents itself as a continuum where the objects have boundaries which are necessarily fuzzy does not imply that we should embrace scepticism and withdraw any attempts at explaining phenomena scientifically (TIERCELIN 1992, p. 75-6; 2005a, p. 100-6, 140-3).

⁵⁰ As FREGE put it, the law of excluded middle is really nothing, but another form of the requirement that concepts should have a sharp boundary. Cf. *Foundations of Arithmetics*. Ed. by AUSTIN. 1952, p. 159. On the "ideal of precision" tradition, see T. WILLIAMSON (1994, chap. 2, p. 36-52).

Consequently, to define, to specify is not necessarily to precise, in other words, to suppress any kind of indeterminacy; in fact, it is exactly the opposite. There is food for meditation here about what Peirce has to say on the temptation of precision or over-precision. If a term is completely precise, completely specified, it does not enable to raise interesting questions any longer, *i.e.* to make information progress. If it is too precise, either it runs the risk of raising pointless questions⁵¹ or it runs the risk of inducing us into error. So there is an illusion consisting in believing that one should or could put an end to the vagueness of ordinary language through precision.

In that respect I think we must regard the difficulties encountered in a definition of art or of what an artwork is not as a defect but as a normal situation which has to do with all productions exhibiting some form of intelligence or some creation of intentionality. However, the fact that indices are necessary in order for an assertion to work as such means that Peirce would not view a work of man in a purely nominalistic or Goodmanian way, as a mere symbolic system working at a purely constructionistic or notational system.

By centering the problem of the objectivity of vagueness on interpretation and the reality of the third category, Peirce has underlined that vagueness is less a matter of syntax or of semantics or, as Kit FINE (1975) would put it, of “deficiency of meaning” than it is irreducibly linked with *pragmatical* considerations. First because all interpretation takes place in a *context* of communication: in that sense, it is finally not important that some predicates should suffer from logico-semantic indeterminacy, so long as the context is there to help us specifying the content of the assertion. But also because assertion involves beliefs, habits, which manifest themselves in our use of signs (and to that extent, in our conceptual as well as linguistic use). This point is interesting because it means that one should not perhaps confine the discussions on vagueness to a linguistic investigation, *i.e.* to a theory of the production and determination of meaning, nor to the question whether some logic should be created in order to account for the objective vagueness of ordinary language. Perhaps, one should also try to analyze the mode of production and the role played by our beliefs in the formation of our concepts and in their uses. When we apply this analysis to art, we realize that in order to get a clear grasp of the nature of an artwork, or to understand its operating mode, we must not only look at its structure (for example at the sound structure of a symphony), but also at the intentions aimed, and also at the (historico-cultural-social) context in which it was created (Levinson), performed as well as to the artistic practices with which it was associated, which, however diverse they might be, depending on the style, genre and type of work produced, and on the artistic group, school or movement, often define an array of features which are more precise and less arbitrary than one thinks, in terms of rules and

⁵¹ How interesting would it be, for example, to know, concerning such statements as “Peirce wrote that paper”, what the colour of the ink he used was, or the name of the father of the man who made the ink, or the movement of the planets at the time of his birth etc.? (CP 5.448, n. 1). To say that I have one hundred twenty three thousand blond hair is undoubtedly precise and remains none the less vague. Hence, it is a bit useless to be over-precise (CP 1.112; 8.244). “It is easy to speak with precision upon a general them. Only, one must commonly surrender all ambition to be certain. It is equally easy to be certain. One has only to be sufficiently vague” (CP 4.237).

codified activities, academic schools, filiations, trainings, or relative stability of transmission of common conventions (MICHAUD, 1999, p. 36-8), all of which, in particular, helps to relativize the relativism one might be inclined to.

5.2. Epistemic Vagueness

Contrary to the semantic view, the epistemic view holds that our vague predicates do have *in fact* precise limits of application, but which we are ignorant of. As we have seen, to a certain extent, Peirce admits that vagueness has an epistemic dimension, due to our incapacity, in certain situations, to discriminate between our concepts.

Now, it is often noted that our epistemic limitations and fallibility are good reasons for being sceptical about the possibility of getting a right evaluation of what a work of art really is, of its real aesthetic qualities and about the possibility of objective aesthetic judgements. But, as one also knows now, imprecision, asymptotic values, errors of measurement must be taken into account in physical sciences to such an extent that a fallibilistic epistemology, capable of capturing such elements of uncertainty are estimated by Peirce as the best epistemology in handling such problems. In the same way, we should get rid of the idea that because of our ignorance in some domains in art, and because of the irreducible fallibility of our judgements, we are utterly unable to reach any objectivity in our aesthetic judgements. Indeed, there is a kind of criteriological disarray, all the stronger today as it seems now to be inscribed into the very definition of the domain. The works are so diverse and the experiences so disparate that they have come to constitute the paradoxical definition of a “de-defined” art: now if we no longer have a coherent aesthetic experience but rather a plurality of experiences, what can possibly be the conditions of aesthetic judgement, when we are not even sure of its definition (MICHAUD, 1999, P. 55)? Rather than coming back to some form of dogmatic or neo formalist view consisting in viewing some works as canonical or some artists as the paradigmatic reference, or, on the contrary, rather than admitting that experiences have indeed become so incommensurable that we should adopt a sceptical stance and give up all inquiry into the nature of aesthetics, or even worse, rather than sinking into some hyper – subjectivism that refuses to decide between strictly personal aesthetic judgements, and prefers transferring one’s judgment to competent groups of experts, or to the verdict of such and such mundane and snobbish tribe, it may be better to try and see how, despite objective pluralism and irreducible fallibility, we can still try and explain how and why such artistic qualities may produce such and such aesthetic experiences, and also why, as Hume taught us, the standards of taste may be something for which the education of our delicacy and of our sensibility does play an important role and is capable of improvement in the elaboration of correct judgemental criteria.

5.3. Ontic Vagueness

But there are also lessons to be drawn from Peirce’s analysis of vagueness at the ontic level, especially in terms of the kind of realism that might be appropriate to defend in art. Let me just spell out a few ideas.

As I have said, people often object to real vagueness because they see it as being in contradiction with the laws of identity and also because, to a certain extent, they believe that the defenders of such a position must have to go so far as holding that there is vagueness “all the way down” in order for the world to be vague (HAWLEY, 2001, p. 116). But of course, Peirce does not hold such a weird position: vagueness is but one of the three components of reality (beside individual existence and generality). What he wants to point out is precisely that one should address the problem of ontic vagueness in a way one is not familiar with: namely, first in terms of the clarification of the three categories involved, which, although irreducible, are always linked together *within* experience. Second, in terms of the definition one should give not so much of a vague object than of an *object* itself, and of the way the three categories work: for example, if the object is defined through the category of existence or reaction (*secondness*), then there is no vagueness at such a level. The object may be taken as something perfectly precise. However, its *reality* is not the same as its *existence*; and as far as its reality is concerned, it should rather be viewed in terms of real *possibilia*, or nomological and conditional *would-be*, rather than in terms of an individual substance⁵². In view of Peirce’s realistic (Scotistic, not Platonistic) ontology, what might then be the form of a correct realism of vagueness in art might take? Here are some brief suggestions:

One should view a *work of art* neither as a Platonic form, normative type or formal structure or totally mind independent and transcendent production, nor as a mere mental creation or formal symbolic, notational construction. But rather as a sum of dispositions (belonging more, to a certain extent, to an artefact than to a natural “object” properly speaking), whose aesthetical functioning is partly natural and partly normative and lawful. As a consequence, even if the *nature* of the work of art happens to change (through reproductions, performances, recordings, translations, restorations), it still remains *relatively* the same work of art (but “resemblance” is here more helpful than talk about “relative identity”), so long as its aesthetical functioning (here Goodman might be helpful: in terms of semantic, syntactic density, relative saturation, exemplification, multiple reference) persists and remains coherent, intentional and meaningful (and recognizable and evaluable as such by the “aesthetic community” of observers and users, which has more to do with a Humean or Kantian-Peircean-Jamesian-Putnamian agreement of educated sensibilities and tastes) than with the judgements of experts) through these various changes. The dispositional character of the work of art explains why (contrary to Gilson’s view), it continues to exist, even when it is not performed, read, or in the darkness of a museum, but also why it remains for ever open to new and endless interpretants.

As far as *aesthetic properties* are concerned (either affective: poignant, passionate, scaring, troubling, or evaluative: beautiful, ugly, sublime), one should admit that they

⁵² One underestimates the importance played by the “substantialist” model in many analyses that are conducted today in the philosophy of science, especially in terms of the evaluation of the role that dispositions may play in contemporary science, and in particular of their relations to their supposedly necessary “categorical” basis. See TIERCELIN (2005b).

supervene on physico-phenomenal properties⁵³, although they remain irreducible to them and are as such to be counted as *real* properties. Again, they do not supervene directly on them, but only through the network of our beliefs, emotions and phenomenal impressions (Levinson 1990: 146). In that respect, one can explain the aesthetic properties of a work of art out of its non aesthetic properties, though not infer the former ones from the latter (SIBLEY, 1965; ZEMACH, 1997, 5.2; POUIVET, 2000, p. 143). In that respect, too, one might view aesthetic evaluations not so much as primary qualities of an hypothetical “object” of art as secondary qualities, namely, as something which is produced by the artistic qualities imposed on the object, exactly as the secondary qualities are, in Locke’s sense, the effect of the properties of the insensible parts which constitute the bodies. As such, they are also endowed with such a disposition or power as to be able to *cause* an aesthetic experience of evaluation in a rather similar way as ethical values have been held, by McDowell or Putnam, as being such both dispositional and objective properties.

As far as *aesthetic judgments* are concerned, it is important to note that these should be truth evaluable: even if their value is not independent of the psychological or natural capacities of the human mind: indeed, without some experience, no aesthetic value may be formulated. But such an experience may be objective, in so far as it considers that the work of art has its proper qualities, and claims that those are presented to man through some perceptual experience which is universal and direct (MICHAUD, 1999, p. 21). It is also important to note that the fact that epistemic vagueness (ignorance) or error should be possible is no objection to the reality of the properties correctly attributed. As a matter of fact, one tends to overestimate the fallibility of aesthetic judgments (which should not be confounded with aesthetic projectivism, namely the thesis that no aesthetic judgement is objectively justifiable). Some of them seem to be much more solid than, incidentally, many scientific judgements. For instance, most scientific judgements from the time of Shakespeare are now null and void, whereas those about Shakespeare’s plays are not (POUIVET, 1999, p. 164; MICHAUD, 1999, p. 55, 100).

All the same, it still remains that very often the standard conditions of observation (contrary to ZEMACH, 1997) are not easily determinable. We agree on what, for example, “well balanced” means; otherwise we could not even be able to disagree on the fact that the work of art is such as it is, but we have difficulties in explaining in what correct conditions such or such work is well balanced: in a word, aesthetic properties are real, but it is epistemically difficult to justify them because we do not know what are the relevant conditions of their correct attribution. They remain indeterminate and controversial, and this has to do more with epistemic vagueness than with the question of the plurality of sensibilities.

⁵³ Which means that “two objects (e.g. artworks) that differ *aesthetically* differ *non aesthetically* (i.e. there could not be two objects that were aesthetically *different* yet non aesthetically *identical*: fixing the non aesthetic properties of an object fixes its aesthetic properties” (LEVINSON, 1990, p. 135). However this should be meant not in a reductionist sense, but rather in an emergentist sense. For example “straightness as a *visual feature* of a line is not *the same thing as* the satisfaction of various physical conditions” (1990, p. 141).

In that respect, even if one maintains that there are good reasons not to reduce ontic vagueness either to semantic or to epistemic vagueness, it remains that “epistemic vagueness” remains one of the most difficult problems to handle if one wants to defend a satisfactory realism of vagueness in art.

WILLIAMSON himself admits that, “strictly understood, the distinction between vagueness and precision applies to representations. But that does not rule out the possibility that it reflects a corresponding distinction in what is represented” (1994, p. 256).⁵⁴ And he adds:

The nominalist suspects that properties, relations, and states of affairs are mere projections onto the world of our forms of speech. One source of the suspicion is a sense that we could just as well have classified things differently. Vagueness is indeed one manifestation of the fact that our classifications are not fixed by natural boundaries. The vagueness of singular terms suggests that if the nominalist conclusion did follow, it could not exempt the category of objects. The boundaries of a particular mountain reflect our language no less than do those of the property of mountainhood. However, it would be an obvious mistake to conclude that our language created the mountain; it is a less obvious mistake to conclude that it created the property. If a subtler form of dependence is at stake, it is not obvious what it is [...] Even so, one can use the rough and variable notion of thought *de re* to point the moral that, on the epistemic view of vagueness, our contact with the world is as direct in vague thought as it is in any thought. The cause of our ignorance is conceptual; its object is the world” and, at all events, he seems to concede, “the metaphysical issues remain to be resolved. (1994, p. 269)

⁵⁴ Hence WILLIAMSON claims that the epistemic view of vagueness, which allows that identity be both determinate and indeterminate at the same time, can give a “modest” sense to the notion that there is vagueness in things (1994, p. 257 sq.). For example “suppose that rivers 1 and 2 join; downstream there is a river 3; it is unclear whether river 2 is tributary of river 1. It is correspondingly unclear whether river 1 = river 3. The terms “river 1”, “river 2” and “river 3” may be taken to express ways of thinking *de re* of the rivers, perhaps given by perception. It is therefore unclear of river 1 and river 3 whether the former = the latter.

What of the Evans-Salmon argument? Surely it remains open that river 1 = river 3; but how can that identity be unclear? Well, suppose that river 1 = river 3. It is clear that river 1 = river 1. We can take both “a” and “b” in the above account to be “river 1”, x to be river 1 and y to be river 3, for since “river 1” expresses a way of thinking *de re* of river 1, which is river 3, it also expresses a way of thinking *de re* of river 3. Thus it is clear of river 1 and river 3 that the former = the latter; this is a valid form of the Evans-Salmon argument. By the assertion at the end of the paragraph it is unclear of river 1 and river 3 that the former = the latter. However, this is no contradiction, for clarity *de re* and unclarity *de re* have already been seen not to be incompatible. The identity is clear under one pair of ways of thinking of the river, not under another” (1994, p. 265-6). Yet, as Engel has observed, “such a view makes it hard to give even a modest sense to the notion that there might be vague objects; in so far as vagueness remains a property of our representations: in that sense, it seems hard to say that things in themselves might be vague or precise, for precision just as much as vagueness is a property of our representations” (2003, p. 117).

Pondering on some aspects his reflexions on ontic vagueness had led him to, Peirce himself remarked that:

Now it is certainly conceivable that this world which we call the real world is not perfectly real but that there are things similarly indeterminate. We cannot be sure that it is not so. (CP 4.61)

So, in the end, there are perhaps things that we can say nothing about, or even things that, as Ramsey suggested, we cannot whistle about. In which case, music, poetry or painting might be the most appropriate ways to break the silence.

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