

**DRAFT - PLEASE DO NOT CITE OR QUOTE**

[This is too long - some parts will be skipped.]

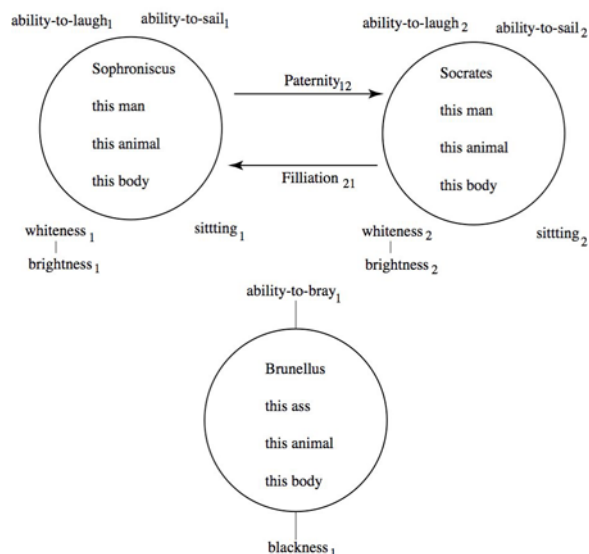
**Abaelard and the Structure of Substance**

At a meeting held in Madison fifteen years ago to discuss twelfth and thirteenth century nominalism I noted that a full understanding of the development by Abaelard and his followers the *Nominales* of their characteristic logical doctrines would require a detailed investigation of their ontology. I would like to thank Paul Thom for providing me with the perfect opportunity to begin that long overdue investigation here.

The logic of the *Nominales* is a form of what we now call connexive logic based upon the principle derived from Aristotle, through Boethius, that nothing may entail or be entailed by its opposite. To understand the character of Nominalist logic it is thus necessary to understand the nature of Abaelard's support for connexivism and in particular his account of the truth conditions of hypothetical propositions. I suggest that he was on the one hand simply, though, as always, quite brilliantly, expressing clearly the consequences of some remarks on inference made by Boethius, while on the other appealing to metaphysical considerations resulting from his reading of the *Isagoge* and the *Categories* to derive striking conclusions about the principles of logic.

**Abaelard's World**

Let us begin then by considering that small corner of the world inhabited by Sophroniscus, his son Socrates, and their ass Brunellus.



**Figure 1: A Tiny Corner of the World.**

According to Abaelard the ontologist who focuses his attention here, or anywhere else, will find only individuals. He will, however, find a very large number of them and included will be the seventeen distinct items illustrated. Three of them are substances, and fourteen are individual accidents. Five of the accidents are properties, that is, they are inseparable from the substances which are subject to them and are instances of kinds of accidents found only in each and every member of the species. The nine remaining accidents are separable from their subjects and two of them, the individual brightnesses, are accidents of accidents. Abaelard explains that:

The expression 'this bright thing' applies to this whiteness in virtue of the brightness informing it ... whence the name 'brightness', which is a form only of whiteness, applies to it alone and not also to body.

Abaelard thus holds that accidents may themselves have accidents and makes a distinction between the relationship which an accident has to its immediate subject and the relationship which it has to the subject

of that subject if there is one. Individual substances are, of course, neither said of nor in a subject. Accidents inform them immediately and are sustained by them as subjects in a relationship which Abaelard refers to as *sustentatio*. Reviving an obsolete word we must thus distinguish between information and sustentation.

According to Abaelard an accident of an accident informs and is sustained by that accident as its subject but does not inform the substance which is the subject of the informed accident. It is, however, sustained by that subject. For Abaelard, then, unlike Aristotle, an accident of an accident is not an accident of the underlying substance<sup>2</sup>. This explains, for him, the incongruity of a claim such as 'this body is bright'<sup>3</sup>.

Abaelard does not say whether there might be higher order accidents of accidents, but as far as I can tell nothing in his theory explicitly militates against this, nor does he say anything about degrees of brightness. He does, however, recognise that three distinct dimensions are required in characterising colour and has an explanation for each of them.

To fully specify the colour of a region it is necessary to distinguish between hue, brightness, and saturation. In practice Abaelard distinguishes one colour from another rather than one hue from another hue of the same colour. His explanation of the colour of a region being of a particular hue is that individual instances of that hue are uniformly distributed over the region. The saturation of the colour in the region is determined by the density of these individual accidents of hue<sup>4</sup>. Thus, Abaelard notes, if we repeatedly dip a piece of bread into a cup of wine it becomes redder and redder as a greater and 'thickness' (*spissitudo*), of individual rednesses accumulates on its surface.<sup>5</sup> And, he says:

Nature too operates this way in giving flowers

their colours. For on the first day it clothes a lily with a layer of whiteness but it does not render it very coloured until, as time goes by, it piles<sup>6</sup> on other layers of whiteness. And as <the lily> receives more parts of whiteness by superimposition, it is said to be more white and more coloured.

Each of the items appearing in our diagram is held by Abaelard to be utterly and uncompromisingly individual. He honours the elements of his ontology with the term of art '*essentia*' which, in this application, has the sense of something like 'existent' though with overtones of what we now understand by 'essence' since substantial existents have an internal structure revealed in the definitions of the species to which they belong. Ontological commitment is marked by the use of the substantive verb '*esse*', 'to be', which according to Abaelard is introduced to pick out all and only existents.<sup>7</sup> Often the more informal '*res*', has just the same sense.

Abaelard's individual accidental forms are what we now call *abstract particulars*, or *tropes*. His substances, on the other hand, are something which has not found a place in contemporary trope theory. They are individual substantial essences, or natures of an Aristotelian kind.<sup>8</sup> They are the substrata for tropes but certainly not bare particulars.

The familiar objects of our experience are exposed in the diagram as composites of a substantial substratum and accidental tropes. We may identify Socrates by his perceptible accidents: baldness, snub-nose, pot-belly and so on, but Socrates himself, Abaelard insists, is entirely distinct from each and all of them. All of the features and any more we might think of would be had by his exactly identical twin brother.<sup>9</sup> Socrates is no

more and no less than the individual substance underlying these accidents. He differs *essentialiter*, that is existentially, or numerically, from Plato simply in being *this* human being as opposed to *that* human being, *this* animal as opposed to *that* one and so on. Thus Abaelard claims that:<sup>10</sup>

...to be an individual consists only in personal distinctness, that is to say that a thing is in itself one, distinct from all others, and with all accidents removed it would remain itself always personally one; nor would it become other nor any less this human being if all its accidents were taken away, so that for example it was not this bald man or this snub-nosed man.

and so:<sup>11</sup>

...in this fashion we take the two names 'Socrates' and 'this human being' to be entirely the same and maintain that they are designative of no accidents of Socrates, but designate only the substance of a human being in its personal distinctness.

That the individuals of Abaelard's ontology are individual substances and individual accidental forms rather than composites of substance and accident seems to me to be absolutely clear. In his logical writings he consistently refers to individual properties both non-relational ones such as this whiteness and relational ones such as this paternity, as existents. Such existents are of course, to some extent at least, dependent in the sense that they are naturally sustained in their existence by the substances which they inform and to which they stand, as Abaelard puts it, *in adjacence*.<sup>12</sup>

Despite only ever actually occurring in adjacence, however, individual accidents are ontologically significant. In one striking aside, indeed, Abaelard is

apparently prepared to grant considerably greater ontological independence to the individual instance of whiteness that happens inhere in Socrates.

Boethius had deviated a little from his usual literalness in translating the criterion of inherence given in *Categories*, 2, and rendered Aristotle's categorical claim as a conditional, thus<sup>13</sup>:

I call that 'in a subject' which is such that if it is in something not as a part, it cannot be separate from what it is in.'

No one is more sensitive than Abaelard to the difference between the categorical and conditional and so here, he says, we should:

... note that <Aristotle> does not say without qualification 'they cannot be without it' but rather 'after they are in it, they cannot be without it'. That is to say that nature will not allow that if accidents are earlier in something, they are able later to subsist without it.

It might thus be, he suggests, that while this individual whiteness now in Socrates cannot inform anything other than Socrates, it might nevertheless before it supervened on Socrates have gone to Plato.

While Abaelard will thus not allow a promiscuous exchange of tropes he will apparently countenance the possibility that Socrates might have had the whiteness that Plato does in fact have and vice versa. As he says:<sup>14</sup>

It might perhaps happen that although this whiteness in fact went to this subject, it might have gone to another, and have always been in that other in such a way that it never came to this subject. But nature cannot allow that if it

now inheres in the one, it is at some time in the other, that is it cannot change its subject by passing from one to the other.<sup>15</sup>

Abaelard is thus not properly speaking a transferable trope anti-realist, as I once proposed, since he holds that if an individual form has a home, it cannot move out without ceasing to exist. This is a very strange claim for which no further justification is forthcoming.

That Abaelard seems to suppose that individual accidents have an identity independent of their substratum and capable of supporting counterfactual claims is not the problem - that is a feature, after all, of many trope theories. What is entirely mysterious, however, is the 'change' that the individual accidents are supposed to undergo in coming to inhere in their subjects, a change which renders them unable to leave those subjects without ceasing to exist.

Stranger still are still are some claims that John Marenbon has drawn attention to in which Abaelard seems to maintain that Socrates might have been constituted as a human being by some other individual rationalness than the one which does in fact so constitute him.

We have, however, to be very careful here. For such a counterfactual claim to make any sense at all Abaelard would have to suppose that Socrates can be identified independently of his rationalness just as he may be identified independently of his whiteness. But if that were so we would rightly ask at what ontological level Socrates is first individuated.

We have seen above that Abaelard holds that to be Socrates is to be no more and no less than to be this human being and he insists too, that while this rational being is not part of the meaning of 'this human being', 'this human being' is nevertheless equivalent in meaning to 'this mortal rational animal'. So 'to be Socrates' *means* 'to be this very animal'.

If, however, Abaelard supposes that this means that this animal is Socrates independently of the differentiae which inform his generic material essence and that the rationalness which actually constitutes Socrates might have constituted some other human being while a different differential form informed the generic matter of Socrates, he will have to explain to us why that form could not have been the rudibility which now constitutes Brownie the donkey. Socrates could not of course be Brownie once he is a human being but why if this theory of limited transferability is Abaelard's could he not have been Socrates the donkey?

The relevant texts here are Abaelard's discussion of differentiae and accidents in his two commentaries on Porphyry's *Isagoge*. In the discussion of accident in both the *Logica Ingredientibus* and the *Logica Nostrorum Petitioni Sociorum* Abaelard notes that one has to take care with Porphyry's definition of an accident as a form which may be both present and absent without the corruption of its subject since understood in one way it will be satisfied by both accidental and substantial forms.

The correct way to formulate the definition is as requiring that the subject have the same substantial status with the form absent that it has with the form present. This immediately rules out substantial forms as accidents. That which rationalness informs in Socrates is, if rationalness is absent, still animal but it is no longer human and, a *fortiori*, no longer Socrates.

It's true, Abaelard points out, that the substantial form of rationalness is present as constituting this man without his being corrupted and true also, he claims, that this man might be without rationalness without being corrupted. The sense in which the latter claim is true, however, is that:

'It might happen that *this substance of a human*

*being* was never rational, and so was never corrupted on account of rationalness, since it was never human'

That is, while it is certainly not true that Socrates might not have been rational it is true that the animal which is Socrates might not have been rational and so might not have been Socrates.

Furthermore though Abaelard allows that some other differentiating form might have been actualised in the material essence of Socrates he does not claim that some other identifiable rationalness could have been actualised there. Rather:

It might also happen that this substance of a human being lacks rationalness, such that it has some other thing (*res*), and never rationalness, so that it is never corrupted by <rationalness not being present.>

There is no suggestion here, then, that Socrates might have been rational in virtue of the rationalness which now constitutes Plato as a rational animal.

In the discussions devoted to differentiae in both the *Logica 'Ingredientibus'* and the *Logica 'Nostrorum Petitioni Sociorum'* Abaelard discusses at considerable length the suggestion that differentiae may be 'accidental' to their subjects. These discussions are much too complex to go into here. To summarise, however, Abaelard holds that in a broad sense of 'accidental' differentiae are accidental in that they are not substances. They do not, however, satisfy the narrow definition of accident since they cannot be absent from their subjects without those subjects losing their substantial status.

In fact, Abaelard points, out although we give rationalness as the differentia of the species human being, all that exists are the particular rationalnesses of individual human beings and none of those is such

that if it did not exist then the species would necessarily not exist. Furthermore<sup>16</sup>:

Socrates himself, just as this human being, exists through <this rationalness>, in such a way that he might exist through another, whether one which exists, or one which never exist.

It is this remark which rightly impressed John Marenbon. The claim is much stronger than the one I have just discussed and it is not obvious that it can be deflated in the same way. The dialectical context here, however, is really very unclear. Abaelard follows the remark with an argument to show, what is certainly true, that it is possible that a human being will exist who is not affected by some presently actual instance of rationalness. Socrates is not mentioned again nor is there any trace of an attempt to explain the apparent claim that he might still be Socrates though constituted by an instance of rationalness other than the one which does constitute him.

This, as I have indicated, seems to me to run quite counter to Abaelard's understanding of individual substance but for the moment I must leave him with this highly unsatisfactory claim since I do not entirely understand the argument in which it is embedded.

Unlike Ockham, Abaelard's anti-realism does not extend to a radical or even moderate reduction of the varieties of accidental forms. He assumes, indeed, that there are forms corresponding to many of the nine accidental categories. Thus in his ontological inventory we encounter, for example, individual tropes of quantity, quality, place, of time, relation, and being in a position.<sup>17</sup>

For Abaelard's development of the theory of the conditional what is crucial is the difference between what we might call the *internal structure* and the *external relations* of an individual existent. By

external relations I mean those relations of separability and inseparability which hold between any two distinct existents. Thus in our example there is an external relation between Socrates and Brunellus, between Socrates and his whiteness, between Socrates' whiteness and its brightness, between Socrates' filiation and Sophroniscus' paternity, between Socrates and his ability to laugh and so on.

Between Socrates and Brunellus the relation is that of complete independence. Each may cease to exist while the other carries on living. A lesser degree of independence holds between Socrates and his whiteness. The whiteness may cease to exist while Socrates remains simply because he spends some time in the sun. The accidental form, on the other hand, cannot, as we have seen, now naturally exist in a subject other than Socrates.

It is unfortunate that we seem to have at best secondhand accounts of Abaelard's theory of the Eucharist since it is in dealing with supernatural possibility here that mediaeval philosophers are forced to reveal their views on the ontological status of accidental forms. The reports that we do have seem to commit Abaelard to the transferability of accidental tropes from bread and wine onto to the air. This would not, of course, contradict his general theory since divine intervention is required to detach the accidents from their original subjects and to preserve them during the celebration of the Eucharist.<sup>18</sup>

The relationship between Socrates and his ability to laugh is yet closer than that between him and his whiteness. For Socrates cannot lose this ability without ceasing to exist. Indeed it is simply not possible for there to be a human being without the ability to laugh. For many modern philosophers this connection between being a human being and having the ability to laugh would be necessary and sufficient for the inclusion of the ability as part of what it is to be a human being.

Mutual inseparability is all that they require for the truth of the biconditional of strict implication 'something is a human being if and only if it is able to laugh'. For Abaelard, however, while this kind of inseparability is necessary it is not sufficient for the truth of a conditional.

Developing a hint from Porphyry and Boethius into a theory Abaelard distinguishes between what we may call *strict inseparability* and *conceptual inseparability*. The ultimate origins of the distinction and the corresponding notions of separability are to be found in Aristotle's scattered remarks on the difference between separability in account and separability in location, or magnitude, and in his puzzling notion of *per se* accidents.

Abaelard insists that while it is not possible for something both to be a human being and not able to laugh, nevertheless being a human being does not require (*exigit*) being able to laugh. He accepts that for the truth of a conditional it is necessary that the antecedent be inseparable from the consequent in the sense that it is impossible for the antecedent to be true when the consequent is false but he maintains, however, that this condition of strict inseparability is not sufficient to capture the relation of consequence, or entailment which exists only where the meaning of the antecedent contains that of the consequent. That is, as far as a substance and its features are concerned, where items referred to in the antecedent and the consequent are internally related.

In our diagram it remains to consider the items which belong in the predicament of relation. Abaelard's account of relations between natural beings is found in two treatments of chapter 7 of the *Categories*, one in the *Logica Ingredientibus* and the other in the *Dialectica*. In his discussion of this predicament Aristotle begins by giving a definition of an 'ad

*aliquid*'<sup>19</sup> or relation (*relatio* which Boethius attributes to Plato.<sup>20</sup> Aristotle finds various problems with this definition and towards the end of the chapter proposes a new one.<sup>21</sup> It is this second definition that is important for us. According to Abaelard the first definition is a definition of words, the second a definition of things<sup>22</sup>. Abaelard has much more than ample opportunity in these two works to distinguish the ontological status of relations from that of other accidents.<sup>23</sup> He does not do so. Rather, over and over again he commits himself to the theory that the bottommost item of the predicament of relation are individual forms which are *res*, or *essentiae*, in just the way that individual forms of the predicament of quality are.

The discussion in the *Logica Ingredientibus* is rather more extensive than that in the *Dialectica* but only because Abaelard deals there at length with 'Plato's definition' and the various properties that Aristotle attributes to relatives, understood by Abaelard as properties of words. Both treatments, make precisely the same points about Aristotle's corrected definition of the relation as *res*. The account of it the *Dialectica* is rather clearer and I will follow it here since with its help we can clarify the one obscurity of the account in the *Ingredientibus*.

Relations, according to Abaelard, are accidental forms informing individual substances,<sup>24</sup> the special characteristic that distinguishes them from other kinds of accidental forms is that they come in pairs<sup>25</sup> and that in virtue of their presence in them their subjects refer, or relate, or stand to one another, in a certain respect. The problem with Plato's definition according to Abaelard is that it is satisfied by the names of all forms and not just by those which are names of relations. Not, note, that it wrongly treats relations as forms, but rather that it does not properly

discriminate among accidental forms, or even between accidental forms and substances.<sup>26</sup> Thus in the *Dialectica* Abaelard glosses Aristotle's corrected definition to show how it applies to all and only relational forms.<sup>27</sup>

...“those are”, he says, “*ad aliquid* for which to be is to exist in a certain way with reference (*se habere*) to another”, that is *those* of which the beings (*essentiae*) so exist with reference to one another that not only do they naturally exist simultaneously in their subjects, but also in respect of them they are referred (*referuntur*) to one another and by themselves make their subjects to refer (*respicere*) to one another, as for example paternity and filiation, servitude and domination.

The accidental form of paternity, then, makes its subject to be a father but it can be present in a subject if and only if filiation is present at precisely the same time in some other subject.<sup>28</sup>

At first sight Abaelard's gloss on Aristotle's redefinition in the *Logica Ingredientibus* is rather different. Indeed at first sight it is hard to make much sense of it:

Definitionem autem quam ipse ex parte sua  
 apponit ad correptionem prioris, sic expone: AD  
 ALIQUID, hoc est relationes, SUNT res illae  
 QUIBUS EST HOC IPSUM ESSE quod supponunt,  
 scilicet HABERE SE AD ALIUD, quae sunt ad  
 <aliquid> essentiae huiusmodi quod esse habent  
 ad alias essentias, eas uidelicet respiciendo.

I have used upper case characters for what Abaelard presumably takes to be Aristotle's words. As in the *Dialectica*, where Abaelard has '*aliud*' our text of

Aristotle - has '*aliquid*'. Geyer, has supplied the '*aliquid*' t but this seems to me to obscure rather than clarify the passage. We get a much better sense by ignoring the '*ad*'. What is initially very distracting is the appearance of '*supponunt*'.

Jeff Brower in a paper on Abaelard's theory of relations proposes the translation<sup>29</sup>:

'Relatives -- that is, relations -- are those entities for which this is the being that underlies them: being relative to another'

This, however, simply cannot be correct. A computer search of Abaelard's works shows that on the rare occasions<sup>30</sup> that he uses the third person plural active of *supponere* it is to indicate either, once, setting down a conclusion, or otherwise that one thing is placed under another - a subject, for example, under a predicate.<sup>31</sup> Perhaps some sense could be found in which relations 'place' something under something but it is hard to see what that would be and even harder to see how the parenthetical remark is supposed to clarify this.

Fortunately a much better solution is available. If we refer to Abaelard's version of Aristotle's corrected definition of *ad aliquid* in the *Dialectica* we see that he has Aristotle proposing that the being of relations ('*hoc ipsum esse*') consists in 'existing in a certain way with reference to another' ('*ad aliud quodammodo se habere*'). '*Quod supponunt*', then marks, Aristotle's statement of what it is to be a relation. It should presumably read '*supponit*', a term which Abaelard often uses in this sense of 'setting down', including a number of times in this section of the *Logica* '*Ingredientibus*'. He uses it, indeed, at one point in his introduction to relations to describe precisely this statement.<sup>32</sup>

If we read '*supponit*' here and ignore the '*ad*' we find that Abaelard offers just the same gloss on Aristotle's

corrected definition in the *Logica Ingredientibus* as he does in the *Dialectica*. He goes on to explain, as he does in the *Dialectica*<sup>33</sup>, the rôle played by relations with respect to their subjects. Translating with my proposed emendation:<sup>34</sup>

You should expound the definition which he for his part adds in order to correct the earlier one as follows: '*ad aliquid*', that is relations, 'are' those things 'for which to be' is what he sets down, that is, 'to exist with respect to another,' they are beings which are such that they have their being with respect to other beings, that is referring to them.

But because properly speaking it is the foundations of the relations, for example the substance itself which is a father or son, which are said to be referred to one another, the relations, such as paternity or filiation, are themselves the respects in accordance with which the subjects refer to one another, he adds: relations 'in a certain way' exist with respect to one another, not in that they refer to one another in their beings, but rather because they make their subjects to refer to one another. Thus in a certain way they are said to be referring *beings*.

The relations of paternity and filiation are the species of individual accidental forms such as Sophroniscus' paternity with respect to Socrates and Socrates' filiation with respect to Sophroniscus.<sup>35</sup> In virtue of being informed with this individual filiation Socrates may be picked out, in Latin, with the appropriate derived relative term '*filius*' signifying *filiatio* in adjacency and Sophroniscus with '*pater*' signifying *paternitas* in the same way.<sup>36</sup>

Relations are such that, for example, a substance can

take on the form of paternity if and only if at exactly the same time some other substance takes on the form of filiation and vice versa. Likewise an individual paternity ceases to exist if and only if at exactly the same time the corresponding filiation perishes. Abaelard argues that a father is thus informed by as many individual paternities as he has children, just he is informed by as many individual equalities as there are things to which he is equal.<sup>37</sup>

This seems to me to correspond exactly to the claim of a contemporary trope theorist though she might not like to take quite this line on paternity preferring to reduce it more basic tropes. Each paternity makes Socrates a father but, as Abaelard points out, the presence of many paternities in a substance does not make it many fathers, we count *ad aliquids* according to their foundations.

As far as natural paternity and filiation are concerned even though Abaelard acknowledges that they occur of necessity simultaneously. He will not allow that this connection supports the truth of a conditional. Both 'if there is paternity, there is filiation' and 'if there is a father, there is son' are, he maintains, false.<sup>38</sup> Following Aristotle the connection between paternity and filiation is not a causal one, and so *a fortiori* not explanatory. That would involve priority, where relatives by definition are simultaneous. They are inseparable, certainly, but mere inseparability is not sufficient to support what Abaelard calls a law of nature (*lex naturae*).<sup>39</sup> For such laws we have to look to the internal structure of existents, that is to natures.

External relations can provide us at best a natural association, or concomitance, (*comitatio naturalis*).<sup>40</sup> Though from the presence of paternity in one subject we may infer the simultaneous presence in another of filiation, the first subjects being a father does not,

and cannot, explain the second's being a son.

I must emphasise that what I am reporting here is Abaelard's theory of natural existents as it is presented in his logical writings. In his theological writings he gives a quite different account of the personal relations constitutive of the trinity. Paternity and Filiation in God are not forms and quite another story has to be told about their distinction.<sup>41</sup>

In telling this story in second version of his theological treatise, however, Abaelard seems to propose a different account of relations in general, explicitly insisting that they are not things.<sup>42</sup> As part of this discussion of the Trinity in the *Theologia Christiana* he insists that the relation of resemblance, is not some new thing itself but rather supervenes on the simultaneous presence of, for example, two instances of whiteness. Given the context of this claim, however, we cannot assume that this is the account of resemblance that he held when presenting the theory of relations as *res*. The theory of relations as not things asserted in a very few lines in the *Theologia Christiana*, and apparently in response to some local dispute,<sup>43</sup> does not appear in Abaelard's final version of his theology nor is it present in any other of his works.

Returning, then, to the ontology set out in the logical writings, as I indicated in the diagram, the individual existent Socrates is, Abaelard insists, the very same existent, that is numerically, or existentially, the same, as this human being and this animal. By the *internal structure* of Socrates I mean the relations that hold between the forms which are involved in the constitution him as a particular individual of a certain kind. Here Abaelard appeals to the distinction between form and matter.<sup>44</sup>

Typically he uses this distinction to contrast the rôle played by the genus with respect to differentiating

forms constituting the most specific determination of an individual. The distinction, however, is a relative one which applies at all levels of the structure down to the constitution of the elements from which corporeal bodies are composed.<sup>45</sup> There are two kinds of creation according to Abaelard and each of them can be effected only by God. In *first creation*, or creation properly speaking, both form and substances are created together. In this kind of creation God creates the elementary bodies - matter and form simultaneously. In *second creation*, or formation God adjoins substantial forms to already existing matter to produce for example a human being from mud.<sup>46</sup>

Individual substances are thus for Abaelard composites of matter and form, of individual matter and individual form, and all forms are positive. Though on occasion we may use a privative term in dividing a genus, Abaelard insists that this can only ever be because we are ignorant of the positive differences which make the substances falling into that division the kinds of things that they are.

The created world is such that the substances of some individuals exactly resemble others. They differ only in their personal distinctness, which distinctness they owe to God. The species, as Abaelard repeatedly insists, is the entire substance of the individual. As he says:<sup>47</sup>

For since 'Socrates' denotes this body in its entire substance and determines it personally, because to it alone is it proper, ' ' is more like it in manner of signification than any other word, '*species*', that is, contains all of its substance, so that it differs only with respect to personal distinction from it.

'Socrates' indeed determines nothing concerning some form or nature which 'human being' does not denote, but rather differs from it only with respect personal distinction.

Individuals belonging to the same species partially resemble individuals of other species in virtue of the presence in them of exactly resembling forms. Thus we get the hierarchy of species and genus based upon progressively lesser degrees of overall resemblance or alternatively on the exact resemblance of the individual differentiating forms involved more and more deeply in the constitution of an individual substance.

I cannot here spend any time discussing Abaelard's theory of universals. I should, however, note the term of art that he employs in characterising the relation of resemblance and which have already used a number of times. It seems to me that Abaelard's notion of sameness of *status* is most usefully understood as indicating that two things have the same degree of resemblance, i.e. either exact or partial, to suitable paradigms. Socrates and Sophroniscus, for example, have exactly the same resemblance structure in that they stand in exactly the same relations of resemblance to exactly the same substances.

To specify the status of a thing (*res / essentia*) is to do no more than note its exact or partial resemblance to some other thing. Socrates' *status* is that of being-a-human being (*esse homo*) because he exactly resembles that being upon whom the original impositor chanced to impose the name 'human being'. The common cause for imposing the name 'human being' on two individual substances is simply their exact resemblance.<sup>48</sup>

In imposing the name 'human being' on a particular existent, the original impositor, as Abaelard notes, may have no notion at all of its internal structure. In doing so, however, he is in effect stipulating that we will call a human being whatever has an internal structure exactly resembling that of the sample. And of course we can recognise other humans as exactly resembling it even if we cannot give an account of their internal structure, that is to say an account of the

nature of human beings. According to Abaelard the act of original imposition gives the term 'human being' its sense (*sensus, sententia*). Exactly what the sense is something which the philosophical logician must discover and which he does according to Abaelard by cooperating with the natural scientist.<sup>49</sup>

It is crucial for a dialectician to discover the sense of words since otherwise he will be at a loss to distinguish truth from falsehood and so a sound argument from an unsound one. In particular he will not be able recognise a true conditional when he sees it or to prove that it is true since what is required for the truth of a conditional according to Abaelard is that the sense of the antecedent contain the sense of the consequent. In particular, for example, glossing Boethius' claim that species and genus are entire in their instances he remarks, that:<sup>50</sup>

Universal names may be said, also, to constitute the substances of those to which they are common ... because in a certain way they enter into their sense, whence they are said to be substantial to them; 'human being' for example is a mark for the whole animal and rational and mortal.

Furthermore, and importantly, it follows, according to Abaelard that a proper name has a sense. When Sophroniscus chose a name for his son the child still had to acquire most of those features which we know and love. Baby Socrates was neither bald nor pot-bellied and though he probably had a snub nose he might not have had one. The name 'Socrates' was introduced by Sophroniscus solely to designate this human being and it has for its sense just the sense of 'human being'. It is thus true that 'if Socrates is Socrates, then Socrates is a human being', and indeed that he is *this human being*.<sup>51</sup>

The late antique theory of consequences as it appears

in the account of the conditional and the topics presented by Boethius develops, it seems to me, out of a concern to characterise the various internal and external relations of substances. Abaelard's reconstruction of it is absolutely remarkable. A relation of entailment holds between a substance and some feature of that substance only where the feature is part of the internal structure of the substance. All such features are positive and so all true entailments have antecedents and consequents of the same quality. The basic thesis of nominalist connexive logic.