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Fiat Objects[1]

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fiat money (OED): inconvertible paper-money made legal tender by government decree

Abstract

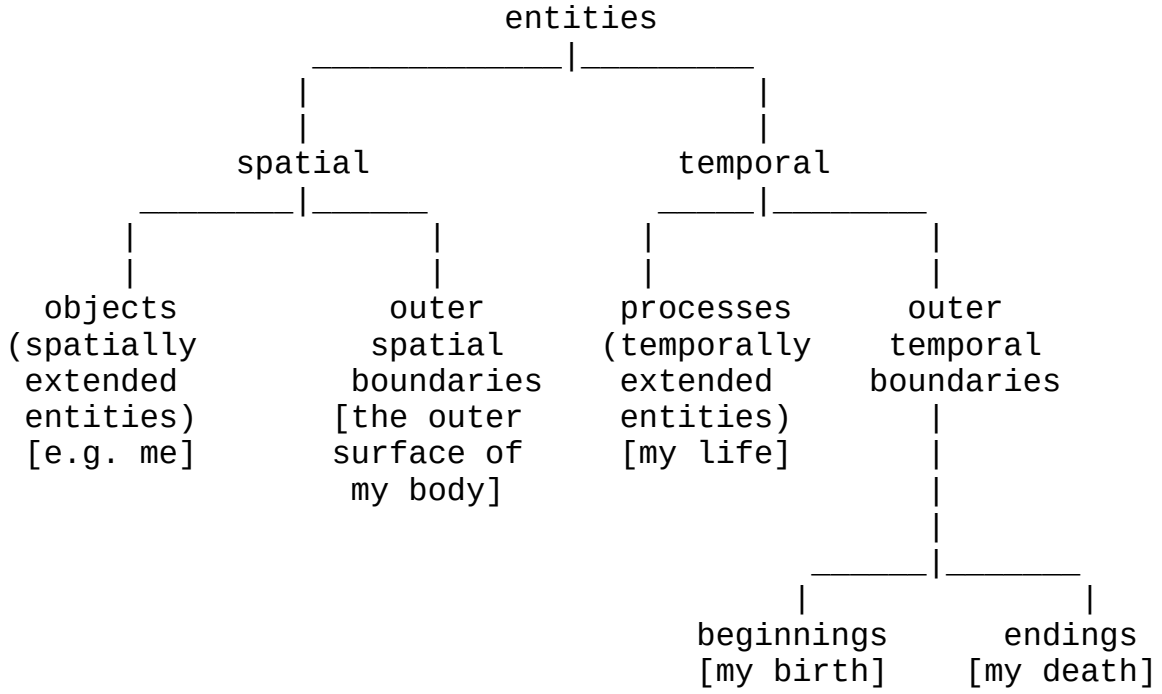
Human cognitive acts are directed towards entities of a wide range of different types. What follows is a new proposal for bringing order into this typological clutter. A categorial scheme for the objects of human cognition should be (1) critical and realistic. Cognitive subjects are liable to error, even to systematic error of the sort that is manifested by believers in the Pantheon of Olympian gods. Thus not all putative object-directed acts should be recognized as having objects of their own. Broadly, the objects towards which human cognition is directed should be *parts of reality* in a sense that is at least consistent with the truths of natural science. But such a scheme should also be (2) comprehensive: it should do justice to each sort of object on its own terms, and not attempt to eliminate objects of one sort in favour of objects of other, more favoured sorts. Linguistic and other forms of idealism, as well as Meinongian theories, which assign to each and every referring expression or intentional act an object tailored to fit, yield categorial schemes which fail to satisfy (1). Physicalistic and other forms of reductionism yield categorial schemes which fail to satisfy (2). What follows is a categorial scheme that is both critically realistic and comprehensive. Thus it enjoys some of the benefits of linguistic idealism and physicalism, without (or so it is hoped) the corresponding disadvantages of each.

1. I am grateful to Laure Vieu for helpful comments on an earlier version of this paper.

The starting point for our categorial scheme is the concept of *extended entity*. Two sorts of extended entity shall be initially distinguished: *objects*, which are extended in space; and *processes*, which are extended in time. Examples of objects are: you and I. Objects are possessed of divisible bulk: they can be divided, in reality or in thought, into spatial parts. Examples of processes are: your life and my current headache. Of course, you and I are in a sense extended not only in space but also in time. But we do not have *temporal parts* in the sense in which our respective lives and headaches have temporal parts.[2]

The suggested categorial scheme now recognizes also the *outer boundaries* of such entities in space and in time. The outer boundary of you is (roughly speaking) the surface of your skin. (We shall return to this 'roughly' below.) The outer boundaries of processes can be divided into *initial* and *terminal* boundaries (for example the beginning and the ending of a race).

All of which leads to a categorial scheme along the following lines:



2. Objects and processes can each be conceived as being put together or assembled out of (respectively: spatial and temporal) proper parts. The same holds true of extended accidents of objects: for example a two- or three-dimensional expanse of colour. See the discussion of such cases in Smith 1992 (under the heading "accidentals").

There are genuine two-dimensional inner boundaries within the interior of my body in virtue of the qualitative differentiation of my body into organs, cells, molecules, etc. There are also genuine one-dimensional inner boundaries discernible on the *surface* of my body in virtue of its wrinkles, as well as edge-lines around warts, eyes, mouth, surgery-scars, etc.

It is clear, however, that we do sometimes speak of inner boundaries even in the absence of spatial discontinuities and of intrinsic qualitative differentiation. Examples are: the equator and Bill Clinton's waist,[3] and if punctate boundaries are allowed then also: the North Pole, the midpoint of the sun, the centre of mass of my body. Even in relation to the perfectly homogeneous sphere we can talk perfectly sensible of its left and right hemispheres, etc.

Analogously, we can distinguish also two sorts of inner boundary of a process. Examples of genuine inner boundaries – corresponding to spatio-temporal discontinuity or to intrinsic qualitative differentiation – might be: the point in the flight of the projectile at which it reaches its maximum altitude and begins its descent to earth, the point in the process of cooling of the liquid at which it first begins to solidify. Examples of inner boundaries of the second sort might be: the boundary between the fourth and fifth minute of the race, John's reaching the age of three.

Let us call inner boundaries of the first sort *genuine* or *bona fide* inner boundaries, inner boundaries of the second sort *fiat* inner boundaries. The opposition between fiat and genuine boundaries is analogous to the opposition drawn by Frege in the *Foundations of Arithmetic* between the 'objective' and the 'actual' [*wirklich*].

> The axis of the earth is objective, so is the centre of mass of the solar system, but I should not call them actual in the way the earth itself is so. One often calls the equator an *imaginary* line [*gedachte* Linie]; but it would be wrong to call it a *made-up* line [*erdachte* Linie]; it did not come into being through thought, the product of a psychological process, but is only recognized or apprehended by thought. If to be recognized were to be created, then we should be able to say nothing positive about the equator in relation to any time earlier than this alleged creation. (Frege, *Grundlagen*, §26, translation amended)

The distinction between genuine and fiat boundaries applies not solely to inner boundaries but also to entities which play some of the roles of outer boundaries, too. National borders, as well as county- and property-lines, provide examples of fiat outer boundaries in this sense, at least in those cases where, as in the case of Colorado, Wyoming or Utah, they lie skew to the physical joints of reality.

But lo! Once fiat outer boundaries have been recognized, then it becomes clear that

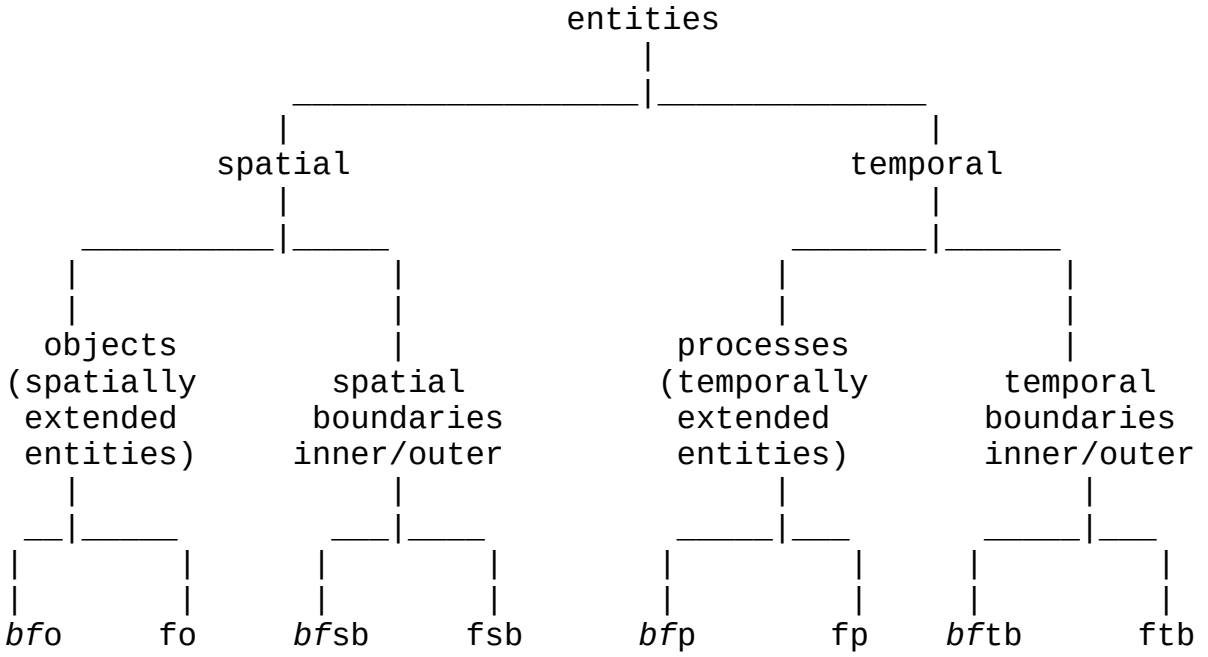
3. We are to imagine Bill Clinton as a convex tube whose midriff is characterized by neither qualitative differentiation nor edges or folds.

the *genuine–fiat* opposition can be drawn in relation to *objects* also. Examples of genuine objects are you and me, the planet earth. Examples of fiat objects are all non-naturally demarcated geographical entities, including Colorado, the United States, the Northern Hemisphere, etc., and also the North Sea, whose objectivity, as Frege writes, 'is not affected by the fact that it is a matter of our arbitrary choice which part of all the water on the earth's surface we mark off and elect to call the "North Sea".' (Frege, *Grundlagen*, §26)

Broadly, it is the drawing of fiat outer boundaries in the spatial realm which yields fiat objects. I say broadly, since it seems that there are cases of objects which ought reasonably to be classified as fiat objects whose boundaries involve a mixture of *bona fide* and fiat elements. (Haiti and the Dominican Republic, or the Northern and Southern hemispheres, are examples which spring to mind.)

Just as the drawing of fiat outer boundaries in the spatial realm yields fiat objects, so the drawing of fiat outer boundaries in the temporal realm yields fiat processes: the Renaissance, the Millennium, the Second World War, the Reagan Years, my childhood, etc. All of these are perfectly objective sub-totalities within the totality of all processes making up universal history, even though the spatial reach as well as the initial and terminal boundaries of, for example, the Second World War were, like the spatial boundaries of Indiana or Illinois, decided (to different degrees) by fiat.

Our categorial scheme can accordingly be extended as follows:



where *bf*o = *bona fide* object, fo = fiat object, *bf*sb = *bona fide* spatial boundary, etc.

The examples of fiat objects mentioned above are all cases where proper parts are delineated or carved out (by fiat) within the interiors of larger *bona fide* objects. While we can assume that all genuine objects are connected, fiat objects may be scattered: they may be such as to circumclude constituent *bona fide* objects within a larger fiat whole. Polynesia is a geographical example of this sort; other examples might be: the Polish nobility, the constellation Orion, the species *cat.* Higher-order fiat objects of this sort may themselves be unified together into further fiat objects (say: the Union of Pacific Island Nations). The fiat boundaries to which higher-order fiat objects owe their existence are the mereological sums of the (fiat and *bona fide*) outer boundaries of their respective lower-order constituents. Set theory is a general theory of the structures which arise when objects are conceived as being united together in this way on successively higher levels but *ad libitum*. This theory is of course of considerable mathematical interest. It is however an open question whether there is any theoretical interest attached to such *ad libitum* unification from the perspective of ontology. For the concrete varieties of higher-order fiat objects which in fact confront us are subject always, in their construction, to quite subtle sorts of constraints.

To set out the constraints on the drawing of fiat boundaries is a task that is by no means trivial. For the moment, however, it is more important to consider what might be the justification for awarding the categories of fiat boundaries and fiat objects so crucial an organizing role in our categorial scheme. Are the geographical and political examples upon which our remarks have been concentrated truly of central ontological importance? To see why this question must be answered in the positive, consider what happens when two political entities (nations, counties, or even parcels of land) lie adjacent to one another. The entities in question are then said to share a common boundary. This sharing of a common boundary is, I want to claim, a peculiarity of the fiat world: it has no analogue in the world of genuine reality. To see this, it may suffice to imagine that two bodies, say John and Mary, should similarly converge upon each other for a greater or lesser interval of time, for example in shaking hands or kissing. Physically speaking, as we know, a complicated story has to be told in such cases as to what happens in the area of apparent contact of the two bodies, a story in terms of sub-atomic particles whose location and whose belongingness to either one or other of the two bodies are only statistically specifiable: as far as the *bona fide* outer boundaries of John and Mary are concerned, no genuine contact or coincidence of boundaries is possible at all. In comprehending the apparent contact between the two bodies as a *kiss* or *shaking hands*, however, our healthy common sense grasps the corresponding entities unproblematically as real relations and as cases of genuine contact. My suggestion, now, is that we have to do here with entities belonging precisely to the realm of fiat boundaries in the sense introduced above. Kisses and handshakes and other, similar entities are creatures of the fiat world. Indeed I wish to go further and argue that the denizens of what we might call *common-sense reality* are in every case

entities whose existence is tied to the existence of a system of fiat boundaries in the suggested sense,[4] and from this point of view it is worth bearing in mind that even in the geographical realm there are objects (deserts, valleys, dunes, etc.) reasonably classified as fiat objects which are delineated not by *sharp* outer boundaries but rather by boundary-like regions which are to some degree indeterminate.

The motor for the drawing of fiat boundaries in commonsensical reality is on the one hand human perception, which – as we know from our experience of Seurat paintings – has the function of articulating reality in terms of sharp boundaries even when such boundaries are not genuinely present in the autonomous physical world. Fiat boundaries come to be drawn also in virtue of the groupings and refinings of reality which are involved in our use and understanding of natural language. Such grouping and refining occurs in a two-fold process. On the one hand, linguistic entities are themselves fiat processes demarcated out of concrete sound-material that is in itself not cleanly separated into tidy linguistic units. On the other hand external reality, too, is in a certain sense tailored to fit our linguistically generated expectations. We apprehend the world as consisting of ships, shoes and sealing wax, of bombings, butterings and burnishings, and in each case fiat boundaries are at work in articulating the reality with which we have to deal. Thus if I say 'John built mud-pies in the sand', then the real correlate of the object of this sentence is a complex plurality (fiat object) whose constituent unitary parts are comprehended through the concept *mud-pie*. If I say 'John embarrassed Mary', then the real correlate of the verb of this sentence is a complex dynamic affair (a fiat process) which is comprehended through the concept *embarrass*.[5]

The way in which natural language contributes to the generation of fiat boundaries may be illustrated in relation to the correlated linguistic phenomena of (1) the *mass–count* opposition and (2) *verbal aspect* (Mourelatos 1981). As to (1), the hungry carnivore points towards the cattlefield and pronounces 'there is cow over there'. How does his pronouncement differ, in its object, from 'there are cows over there'? Not, certainly, in the underlying real bovine material. Rather in virtue of the different sorts of fiat boundary which are imposed upon this material in the two distinct cases. As to (2), verbal aspect has to do with the 'internal temporal constituency' of the events towards which our empirical judgments are directed. (Comry 1976). Consider that concrete factual material which is John kissing Mary on a given occasion. This consists, we might crudely suppose, of three objects: John, Mary and a certain complex of

4. The theory of fiat boundaries is thus a contribution to the formal theory of the common-sense world such as is set out in Hobbs and Moore 1985. The ideas here presented may thus be conceived as a further development of the formal theory set out in Smith 1993.

5. There are also what we might call negative fiat objects, as in `John cut a way through the brush', `John dug a tunnel under the road', and so on. (See Casati and Varzi 1994.) The question can be raised whether all holes are to be counted as fiat objects in this sense, or whether there are any *bona fide* holes.

temporally extended processes. In the extended totality of this factual material, fiat boundaries can come to be drawn in a variety of different ways. Thus the given factual material can be comprehended, for example, as: 'John is kissing Mary', 'John is repeatedly kissing Mary', 'Mary is constantly being kissed by John', and so on.

Are such differences (*cow* vs. *a cow*, *kissing* vs. *repeatedly kissing)* 'objective', to use Frege's term? Are they discovered in reality? Or are they created, as linguistic idealists would have us believe, through the introduction into our language of corresponding terms or forms of speech? As the passages we quoted from Frege above make clear, the answer to this question is by no means simple, for fiat entities have characteristics which point in conflicting directions. The elucidation of these conflicting characteristics is a difficult task, whose resolution would come close to resolving the so-called idealism–realism problem, a problem which has dogged philosophers at least since Kant. From our present perspective it will suffice to repeat once more that the entities in question (fiat objects and fiat processes) are autonomous portions of autonomous extended reality and are 'objective' in this sense. The respective boundaries, however, are created by us; they are the products of our mental and linguistic activity, and of associated conventional norms and habits.

The notion of fiat entity, when once clarified, might be exploited, finally, in resolving a long-standing dispute in philosophical discussions of the concept of truth. Truth has classically been understood in terms of a *correspondence* between a judgment or assertion on the one hand and a certain portion of reality on the other. A problem arises in virtue of the fact that reality does not come ready-parcelled into judgment-shaped portions of the sort that are predisposed to stand in relations of correspondence of the given sort. The practitioners of logical semantics have thus tended to treat not of truth as such (truth to reality), but of truth *in a model*, where the model is a specially constructed set-theoretic reality-surrogate. The theory of fiat boundaries can help us to avoid the need for this resort to surrogates by allowing us to treat judgment itself as a *sui generis* variety of drawing fiat boundaries, boundaries which include other boundaries as parts in analogy with the set-theoretic examples (higher-order fiat objects) mentioned above. True judgments effect a drawing of boundaries which is successful (which does not conflict with reality – in a sense still to be clarified). The resultant boundaries themselves are drawn, as before, in the extended world of genuine objects and associated processes. The fiat entities they circumscribe are typically many-sorted: they include both objects and processes (as sentences standardly include both nouns and verbs). Such entities are on the one hand autonomous: that region of reality through which the given boundary is drawn – for example the complex of objects and processes which are involved in John's kissing Mary – exists in and of itself, regardless of our judging activity, and so do all its constituent sub-regions. The whole itself is however also in a certain sense dependent on our judgment. For in the absence of the judging activity through which the drawing of the fiat boundary is effected, an entity of

the given sort would in no way be demarcated from its surroundings. Judgment-shaped parcels of reality can in this way be said to exist in autonomous reality, and to make our judgments true, yet the recognition of such entities is still consistent with that healthy respect for Ockham's razor which is the mark of all scrupulous ontology.

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