AN ANTINOMY OF BARE INDIVIDUALS

Petr Kolář

Individual nudism is a doctrine that states that individuals are bare particulars, substrata which are (in a fairly good sense yet not literally) propertyless. At its face value, individual nudism is fairly innocent and, as a kin of the doctrine of individual substance has a long philosophical pedigree.[1] The aim of this paper is twofold. First, I argue for the thesis that there can be no bare individuals. And secondly, I argue that one can make use of the concept of a bare individual in a less orthodox sense.

Let us define trivial property in the following manner:

(1) *F* is a *trivial property* iff$_{df}$ *F* is not empirical and *all* individuals *necessarily* have *F*.

A non-empirical property is such that one can decide without empirical enquiry whether or not an individual has the property. For instance, the property *being a member of the set {Praha,Brno}* is non-empirical; we can decide without any empirical inquiry of any individual whether or not it has the property (try London, New York City, New Delhi, Bill Clinton, etc.). In contradistinction, the property *being one of the two largest cities in the Czech Republic in 1999* is an empirical property. Only if one has empirical knowledge of the geography of the Czech Republic can she decide of a particular individual's instantiating or non-instantiating the property.

Given the above definition (1) of a trivial property and the explication of the concept of a non-empirical property we can give a few examples of a trivial property. Among trivial properties are: *being self-identical* and *being numerically distinct from all other individuals*. All individuals (be they

[1] For recent rather sympathetic views, see e.g. David M. ARMSTRONG, *Universals. An Opinionated Introduction*. Boulder – San Francisco – London: Westview Press 1989 and David WIGGINS, "Substance." In: GRAYLING, A. C. (ed.), *Philosophy. A Guide through the Subject*. Oxford: Oxford University Press 1995. For recent, rather unsympathetic views, see e.g. Saul A. KRIPKE, *Naming and Necessity*. Cambridge, MA: Harvard University Press 1980 and Pavel TICHÝ, *The Foundations of Frege's Logic*. Berlin – New York: Walter deGruyter 1988.

of whatever nature) are necessarily self-identical; such a property is clearly non-empirical. By the same token, all individuals are necessarily numerically distinct from all other individuals. (If it were possible for an individual, say *b*, not to be numerically distinct from any other individual then in some world, *b* is identical with some *other* individual.) Again, the property is clearly non-empirical.

Indeed, definition (1) introduces *trivial properties* in a manner an individual nudist should like: it excludes all empirical properties and necessary yet specific (i.e. not common to all individuals) properties from the family of properties which are constitutive of individuals. Now, the first attempt to spell out the core of the doctrine of bare individuals more precisely may run as follows:

(2) Bare individuals have only trivial properties.
In symbols (*x* ranges over individuals and *F* ranges over properties):
x is bare $\leftrightarrow_{df}$ "*F*(*Fx* ® *F* is trivial)

Consider the property definition (2) is based on, i.e. property

(P) *having only trivial properties.*

Property (P) is either non-trivial or trivial. Let us examine the options in their turn.

First, let us suppose that (P) is a non-trivial property. Let a thing, say *c*, have (P). Then, by definition of (P), all properties *c* has are trivial. Yet by the assumption that (P) is non-trivial, one of the properties *c* has is non-trivial. Thus the assumption leads to a contradiction.

Let us now examine the other option. If (P) is trivial then any bare individual has only trivial properties as required by definition (2) and it has them *necessarily* by the assumption that (P) is trivial and by the definition of a trivial property. Thus it is not possible for a bare individual to have a non-trivial property. Thus, for instance, it is not possible for a bare individual to have any empirical property. Hence any predication of an empirical property of a bare individual is necessarily false. By individual nudism, all individuals are bare. It follows that any predication of an empirical property of any individual is necessarily false. The conclusion is obviously false. Hence this other option is not acceptable either.

What can the friends of bare individuals do to save the doctrine? They may argue that the above criticism is based on a far too strong conception

of bare individuals. According to interpretation (2), a bare individual is a thing such that *all properties it has* are trivial. The friends of bare individuals may weaken definition (2) of a bare individual and characterize a bare individual as a thing such that *all properties it necessarily has* are trivial. This is interpretation

(2*) Bare individuals have only trivial properties *necessarily*.
In symbols (x ranges over individuals and F ranges over properties):
x is bare* $\leftrightarrow_{df}$ "F(Necessarily(Fx) ® F is trivial).

Let us examine the property *bare** , i.e. property *having only trivial properties necessarily*.

Clearly, *bare** is either non-trivial or trivial.
i) Let *bare** be non-trivial. Then by the definition of a trivial property it holds either
ia) bare* is empirical
or
ib) it is not the case that all individuals are bare* necessarily, i.e. ~$\forall x$(Necessarily(bare*x)).

Let us examine the two sub-options in their turn. From the definition of *bare** it should be clear that there is no empirical test for finding out about *all properties* something *necessarily* has neither is there an empirical test for the presence of a trivial property as trivial properties are non-empirical by definition. From the definition of *bare** it follows that *bare** is non-empirical hence ia) is false.

According to ib) there *can* be non-bare* individuals. Let c be such an individual (in a particular world, W). Then it holds by (2*) that

$\$F$(Necessarily($F$c) & ~(trivial F)).
Then either iba) or ibb) below holds:
iba) c is bare* in some other world(s);
ibb) c is non-bare* in all worlds.

From iba) it follows that *bare** is an empirical property which is false as was established above.

From ibb) it follows that c is necessarily non-bare*. So we have an example of an *individual* for which it is *impossible* to be bare*. So the individual

is not bare* in the actual world either which contradicts the doctrine of bare individuals which is to the effect that (all) individuals *are* bare.

To sum up: ia) is false, iba) is false, and ibb) contradicts the assumption that the doctrine of bare individuals is true. Hence option ib) is not acceptable either. Hence option ib) is not acceptable in general.

ii) Let *bare** be trivial. From *bare** being trivial it follows by individual nudism and (2*) that

*bare** is non-empirical *and* $\forall x$(Necessarily(bare**x*)).

The first conjunct is true (see the above considerations). From the second conjunct it follows that

$\forall x$(Necessarily"F(Necessarily(Fx) ® trivial(F)))
which is equivalent to
$\sim\exists x$(Possibly\$$F$(Necessarily($Fx$) & $\sim$trivial(F))).
In words:

(NE) For no (individual) x there can possibly be a non-trivial F such that x is necessarily F .

Yet there are obvious counterexamples to (NE). Here is one of them. Consider the property *having the same height as Mick Jagger*. Let us call this property "M". Now, M is non-trivial by our definition of a trivial property (1). To wit, neither is M non-empirical nor is it true that all individuals necessarily have M. Yet contrary to (NE) there is an individual that has M necessarily, namely Mick Jagger himself. To sum up, option ii) leads to an obviously false claim hence option ii) is not acceptable either.

The upshot of the foregoing considerations on definition (2*) is then as follows: definition (2*) leads to unacceptable consequences hence it is itself unacceptable. We have seen that *if* the doctrine of bare individuals is interpreted as in (2*) and *if* the concept of a trivial property is explicated as in (1) *then* we can derive obvious falsities from these assumptions. Hence at least one of the assumptions must be false. As we made fixed (1) at the outset we conclude that (2*) must go.

Even though interpretations (2) and (2*) of the doctrine of bare individuals seem to exhaust reasonable on this matter, yet another way of making sense of the doctrine may come to one's mind. It is nothing but a further

weakening of the original intuition, such a weakening being actually equivalent to a possible formulation of the thesis of individual anti-essentialism:

(3) Bare individuals may possibly lack any of their *contingent* properties.

Taken on its face value, (3) is a tautology as it states that it is possible for an individual to lack any of its poperties it may possibly lack. Yet one can envisage the following four ways to understand the thesis:

(3a) Any individual may lack any of its *empirical* properties yet not all of them at the same time (in the same world).

Then the thesis is a tautology as it states that an individual may lack some (yet not all) of the properties it may possibly lack. Thus (3a) is not a viable basis for an informative (synthetic) definition of a bare individual. The second option seems more promising:

(3b) Any individual may lack any of its *non-trivial* properties yet not all of them at the same time (in the same world).

Then the thesis is false as there are obvious counterexamples to it. Here is one of them. Consider an arbitrary yet fixed individual, say *b*. Consider the property B, *being a member of the set {b}*. Now, B is non-trivial as it is not true that all individuals necessarily have B. Yet individual *b cannot* possibly lack B. To wit, in all worlds in which b exists it also is the (only) member of the singleton {b}. The third option is as follows:

(3c) Any individual may lack all of its *empirical* properties at the same time (in the same world).

Then consider the property *lacking all empirical properties*. If the property is empirical then a contradiction follows immediately. If the property isn't empirical then any individual either has it or doesn't have it in *all* possible worlds, i.e. necessarily. Then either individuals are purely abstract and necessarily cognitively ungraspable as they necessarily have no empirical properties like *being coloured* or even *being thought of by a philosopher* which is false or any individual necessarily has an empirical property and then it may not happen that it lacks all empirical properties at the same time which

contradicts the assumption. i.e. (3c). Thus we may conclude that option (3c) is not viable. And, finally,

(3d) Any individual may lack all of its *non-trivial* properties at the same time (in the same world).

For the refutation of (3d), it is sufficient to realize that (3d) entails (3b). As we observed above, (3b) is false hence (3d) is also false.

So far, we have explored the route to the specification of the doctrine of bare individuals which was based on the definition of a trivial property and various ways to pick out the family of bare individuals in terms of having only trivial properties. The foregoing arguments were to show that this route leads to nowhere. So what has gone wrong?

A tacit assumption underlied the hitherto considerations, namely the idea that bare individuals (if any) are individual *things*, particulars of a peculiar sort. The assumption is mistaken. It is at least implicit in the foregoing arguments that no individual things can possibly be bare (individuals) in any of the senses suggested. According to Robert Stalnaker,

> An individual is not a particular kind of thing; it is a particular role that things of any kind may occupy: the role of subject of predication.[2]

Now, if we construe bare individuals as such roles themselves, rather than the occupants of the roles (i.e. individual things however stripped of their non-trivial properties) we can make more sense of the whole doctrine of bare individuals.

An explication of the concept of *role* which is logically and semantically well-founded can be found in Tichý writings under the notion of an individual *office*.[3] In general, an office is a partial function that maps <possible-world, time-point> couples onto objects of a definite type, for instance, individuals, properties, propositions, etc. In particular, *individual offices* map <possible-world, time-point> couples onto individuals.

Thus, for instance, the office of *the present king of France* takes <world, time-point> couples onto particulars, the office of *the most bizarre property of humans* maps <world, time-point> couples onto properties, and the office of *Kurt Gödel's most favourite proposition* takes <world, time-point> couples

[2] Robert C. STALNAKER, *Inquiry*. Cambridge, MA: MIT Press 1984.

[3] See, e.g. Pavel TICHÝ, "Existence and God." *Journal of Philosophy*, 1979, 8, p. 403–420 and TICHÝ, *The Foundations of Frege's Logic*, pp. 201 *ff*.

onto propositions.[4] The first office mentioned picks out a definite particular (if any) in every given world at a given time point, the second office mentioned picks out a definite property (if any) in a world at a time point, and the last office mentioned picks out a definite proposition (if any) in a world at a time point. The respective particular, property, and proposition are the *extensions* of the respective offices in the given worlds at the given time points.

One of the immediate consequences of the suggested treatment of bare individuals in terms of individual offices is the fact that bare individuals, unlike ordinary particulars, are *abstract entities* as they are *functions* of a certain type. Let us now define a bare individual in the following manner:

(4) A *bare individual* is an individual office having a unique non-empty extension which is uniform across all possible worlds.

The account may seem circular at the first sight: we define bare individuals in terms of individual offices which are themselves defined in terms of functions from possible worlds and time points to *individuals*. Yet the circularity is seeming, indeed; the family of individuals which are the values of the offices (i.e. bare individuals) at their arguments is a family of ordinary particulars, i.e. objects of a different ontological status than the offices have themselves. The family of particulars is pre-theoretically given as well as the family of possible worlds and the family of time points; thus defining functions over those families poses no circularity problem.

Note that analyses (2) and (2*) suggest that properties *bare* and *bare** could be dismissed as ill-defined. To wit, they are defined in terms of quantifying over *all* properties while themselves being properties. Here, recall Russell's rule: "Whatever involves *all* of a collection must not be one of the collection"[5]. Our last definition does not have the drawback. Now, for any office satisfying (4) it holds that "no non-trivial property it happens to instantiate is *constitutive* of it" as an individual nudist puts it[6]. For note that

[4] The notions of property and proposition get their formal explications within Tichý's system of "Transparent Intensional Logic"; see TICHÝ, *The Foundations of Frege's Logic*. The explications are the usual (temporal) possible worlds semantics ones: properties (of objects of a definite type, a) are construed as mappings from <possible-world, time-point> couples to members of a; propositions are construed as mappings from <possible-world, time-point> couples to truth-values.

[5] Bertrand RUSSELL, "Mathematical Logic as Based on the Theory of Types." In: MARSH, R. C. (ed.), *Logic and Knowledge*. London: Allen & Unwin 1956, p. 63.

[6] TICHÝ, *The Foundations of Frege's Logic*, p. 210.

the only property which is constitutive (in any reasonable sense of "constitutive") of a bare individual according to definition (4) is the property *has a unique non-empty extension which is uniform across all possible worlds*. And this property is trivial.[7]

[7] Here, the definition of a trivial property is implicitly extended from individuals to bare individuals as defined in (4). This can be done explicitly by substituting "bare individuals" for "individuals" in (1).