

ARTICLES

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On Zalta's Notion of Encoding in Conceivability-Contexts

A clear-cut distinction is needed between abstract and ordinary objects for the sake of clarity of our ontology. Even though we decide that our variables uniformly range over individuals, some formal distinction must select apart abstract and concrete objects within a unified domain of quantification. A fine way of putting the required ontological difference is Zalta's proposal that abstract objects *encode* their properties while concrete ordinary ones *exemplify* them (Zalta 1988: pp. 15-32). The difference is then captured by distinct modes of predication and is notationally rendered as: 'xF' for x encodes the property F and 'Fx' for x exemplifies this same property; the position of the variable indicates on which kind of objects it ranges. In principle no ordinary object encodes a property and no abstract object exemplifies one.¹ The extent of this neat distinction in some particular intensional contexts is what will be critically discussed here. This discussion will hopefully lead to a finer attunement of our intuitive understanding of the ways we intentionally relate to all sorts of objects with the spelling out of logical features of intensional contexts.

I. The Modal Axiom of Encoding and Its Intuitive Consequences

The intuitions underlying each of the two modes of predication and the chosen terminology are clear. There is no other way to identify abstract objects but by knowing their properties. Properties had by ordinary objects are, generally, less identificatory. Abstract objects encode their properties in the sense that the latter form crucial pieces of information in view to be able to mentally grasp those very objects, while concrete objects merely exemplify properties which they could, in other circumstances, fail to. Or,

¹ Which does not exclude relations relating abstract and concrete objects.

again, abstract objects are such as we define them – that is as we predicate something of them – which is not the case for ordinary objects. The constructive element in the ontology of abstract objects seems to motivate a specific logical behaviour, as expressed by Zalta’s following Modal Axiom of Encoding: ‘ $\diamond xF \rightarrow \Box xF$ ’ (Zalta 1997). Properties possibly encoded by an abstract object are encoded by the same object in every possible world. Concrete objects do not similarly behave in modal contexts, unless we wish to say that every possibly exemplified property is part of their essence, which would ruin the idea of an object possibly being otherwise altogether. It is clear that we do not tend to reject this same counterintuitive conclusion in the case of abstract objects.

Let’s note first that there is a possible double reading of the Modal Axiom of Encoding. One reading, just indicated, merely states that abstract objects essentially possess their properties. What we have here is a static characterization of the rigid extension of encoded properties across logical space. On the other reading, we pay closer attention to the antecedent of the conditional: if it is possible that an abstract object encodes a given property, then it encodes it necessarily. If we bear in mind the fact that abstract objects depend for their existence on acts of stipulation – as the very notion of encoding inclines to think – we can make the antecedent reflect this constructive aspect of our intentional relation to abstract objects. Every act of stipulation deemed acceptable essentially defines an abstract object. What the Modal Axiom of Encoding intuitively means, then, is: if we envision the possibility of an abstract object encoding a certain property, then we have essentially characterized this abstract object. According to this reading, unlike what our sense of alternative makes intuitively congenial to ordinary objects, it is vain to think of an abstract object as being otherwise than it is, and even otherwise than it could be.

This reading of his axiom is not indicated by Zalta, but it naturally correlates a distinctive logical behaviour of abstract objects in intensional contexts with the way we intentionally stipulate their existence.² On this reading what the axiom states is that possible encoding is necessary encoding. And however we define possible encoding, once we get it and the corresponding abstract object, there is no more possibility to make the

² If the role of the Axiom were simply to express the fixed extensions of encoded properties across logical space, ‘ $xF \rightarrow \Box xF$ ’ would suffice, in the kind of models for modal logic, with no actual world designated, which Zalta prefers.

latter otherwise. What is possible encoding? As we have already emphasized, the notion of possibility, for an abstract object, involves no comparison between possible worlds wherein the concerned abstract objects would clothe different guises. So either possible encoding means that the encoded property is consistent with other properties of the same object (internal possibility) or, in a looser way, that the stipulative act targeting the abstract object is not empty: it actually targets an abstract object encoding a certain property (intentional possibility). Internal possibility is an extranuclear property of abstract objects which can exert more or less lax constraints over the individuation of abstract objects³. Intentional possibility is, similarly, accompanied by degrees of representational constraints over the targeted object. It is not a neutral matter to define in a precise way what to admit as possible encoding, but we more exclusively focus on one common aspect to all putative definitions: acts of stipulation or intended encodings (and intuition lends them a large amount of freedom), when possible, are creative, in the sense that they yield an object, and they give direct access to its essence.

This immediately points to a major intuitive difficulty for the Modal Axiom of Encoding. If its constructive reading reflects how we mentally individuate and grasp abstract objects and accurately reflects the behaviour of abstract objects in intensional contexts, it also egregiously fails to account for the way we latch onto the same abstract objects, or at least think we can do, across more than one act of stipulative encoding. If each possible encoding of a property to an object freshly individuates a new denizen of the realm of abstracts, there is no way to express something counterfactual about some previously individuated abstract objects that we wish to keep in mind. The problem is clearly that with abstract objects counteressentiality comes too soon – every act of encoding about an intended abstract object shifts the identity of what we are thinking about. Creativeness entails systematic shiftiness. However, we can easily imagine cases where stipulative encoding would rather not be creative or shifty, like when we try to discover some as yet unknown property of a given abstract object, or like when we merely add, subtract or substitute one of its properties. In a sense, even if we change the essence of such an object, we, at least so may we think, did not intend to change its intentional identity. A

³ Talk of extranuclear properties belongs to the neo-Meinongian tradition. See in particular Parsons 1980. Extranuclear properties define constraints on first-order or nuclear properties, more or less stringent conditions of consistency can be defined.

given straight line remains self-identical, for us, when we consider it, alternatively, in Euclidean and in Lobatchevskian spaces, although it comes to encode significantly distinct properties. Barring shiftiness while preserving the intuitions of free stipulation and creativeness seems sometimes required.

II. Counteressential Conceivability

A parallel can be drawn with the way we may intend to counterfactually negate some essential properties of ordinary objects. In spite of the fact that, contrary to abstract objects, essence is only a subset of an ordinary objects's properties, shiftiness and creativeness have been all the same pointed out by authors defending the Modal 2-Dimensionalist account of conceivability, as Yablo concisely puts it.

Very often one finds a statement E conceivable, when as a matter of fact, E-worlds cannot exist. (...) the failures always take a certain form. A thinker who (mistakenly) conceives E as possible is correctly registering the possibility of something, and mistakenly the possibility of that for the possibility of E. (Yablo, 2000: 98).

Modal 2-Dimensionalists contend that when we try to conceive of water as not being H₂O, for instance, we conceive nothing about ordinary water itself, but perhaps something about another substance in its epistemic vicinity. Shiftiness and creativeness are not, then, specific behaviours of abstract objects in intensional contexts. They arise, more generally, when negations of essential properties of any kind of objects occur. Shiftiness and creativeness form two grades of a common phenomenon which consists in change of intentional identity. Shiftiness means that the intended object of our thoughts has been modified; creativeness that our intentional state is not empty and is immediately specified by the predicative content of our act of conceiving. Modal 2-Dimensionalists accept both shiftiness and creativeness, while a Kripkean approach to counteressential conceivability rejects both. A Kripkean would retort to an epistemic agent that she has conceived nothing about water and nothing about anything else in the vicinity either, when she pretends that water could have chemically differed. If she persists in thinking that she actually intends to conceive something about ordinary water, then both the Modal 2-Dimensionalist and the Kripkean, for their different reasons, will

diagnose serious modal self-delusion. We propose a solution in the between.

One can reject the diagnosis of modal illusion and tries to make sense of the persistent, if not fully justified, feeling by the agent that she intends to think something, albeit counteressential, about ordinary water. Two ways in view to make sense of this feeling can be suggested. One, which we leave undevelopped here, is to hold that, while the agent does not bear in mind any possibility concerning ordinary water, she nonetheless seriously entertains an impossibility about this very substance, rather than a possibility about an epistemically close substance. Another interesting elaboration of the agent's epistemic situation is to say that, although ordinary water exemplifies not being H₂O in no possible world, it – i.e. ordinary water – possibly encodes this same property. As no ordinary object encodes any property, according to Zalta's neat basic ontological distinction, we'd better rephrase this suggestion in more cautious terms and describe the agent's intuition by saying that, in such a particular conceivability-context, she makes as if ordinary water encode not being H₂O or, plainly, that she considers the state of affairs of ordinary water not being H₂O *in abstracto*. One can also introduce a term of art and characterize the particular intensional context at stake as ordinary water possibly *quasi-encoding* one of its counteressential properties.

Now, even if we judge useful to adopt a Modal Axiom of Quasi-Encoding, in order to reflect the freedom and creativeness of our counteressential stipulations about ordinary objects, we will not be exposed to systematic shiftiness, as we were with abstract objects. Whereas it is certainly true that quasi-encoded properties always essentially determine some quasi-abstract objects or, more precisely, some states of affairs consisting of *an ordinary object being in a certain counteressential way*, we, obviously, do not lose track of the original ordinary object through such a stipulative act, nor along its iteration. The original object continues to be nominally present in the successive descriptions of the intended states of affairs. Moreover every property quasi-encoded by an ordinary object is a property which does not belong to its essence and, by definition, which is not possessed in every possible situation. These features of quasi-encoding explain why, whereas we mentally strip an ordinary object of its essential properties, this object may remain intentionally self-identical, and how we can feel

epistemically entitled to think that we continue to think and conceive about it what we think and conceive.

Quasi-encoding preserves intentional identity of ordinary objects across sequences of counteressential predication. From an epistemic point of view we do not have to ascribe to the agent any form of radical ignorance of what water essentially is while she engages in such sequences. Two cognitive tracks can be pursued in parallel: one keeping hold of the essential properties of ordinary water and its identity, the other following it across counteressential settings. A typical prejudice of the two aforementioned approaches to conceivability is to postulate too close limitations to an agent's epistemic capacities. We keep the Kripkean notion of rigidity since 'water' continues to designate the same substance in every conceived situation, and the Modal 2-Dimensionalist import in considering that the predicative content or our act of conceiving determines a situation and possibly a new object in this situation.

III. Quasi-Encoding and Hypothetical Stipulation

The notion of quasi-encoding might contribute a solution to the problem of systematic shiftiness met with abstract objects. When we hypothesize about some property possibly encoded by a given abstract object, because we ignore whether this object actually encodes this property, it is expedient, in order to reflect our current epistemic state, not to immediately entail that the intended object essentially possesses the hypothesized property. More precisely, it is useful to be able to express the fact that – although we have individuated, so to say unwittingly, a new abstract object which, in accordance with the Modal Axiom of Encoding, essentially possesses the hypothesized property – our attention has not shifted towards this new abstract object but holds back on the object we had previously in mind. It appears that the way we intentionally proceed with abstract objects reciprocates situations of counteressential conceivability involving ordinary ones. In those latter cases we direct our attention to an object whose essential properties we know and continue to be aware of while we negate one of these properties. Reciprocally, in the case of hypothetical stipulation, we ignore whether an essential property belongs to an intended abstract object. So we individuate a fresh new abstract object of which we ignore whether it is identical or not with our intended object. Again, in the case of ordinary objects negation of an essential property does not make us

lose track of the original object, while in the case of abstract object predication of an essential property does not necessarily imply that we shift our attention to this newly characterized object.

There are intentional states, thus, in which we deliberately engage, directed towards abstract objects whose behaviour does not fully comply with Zalta's Modal Axiom of Encoding. Even if a given abstract object *A* possibly encodes a certain property *F*, and then necessarily encodes *F*, we can also consider the epistemic situation in which we wonder whether *A* possibly encodes *F* or not. In this situation, we wish to refrain either from a necessary or essentialist conclusion or from a too hasty identification of *A* with its hypothetical characterization as encoding *F*. Such acts of hypothetical stipulation are better explained in terms of our notion of quasi-encoding through which we do not essentially apply *F* to *A*. In a similar way as for ordinary objects in counteressential contexts, we give a name to the object that we have in mind and it remains nominally present across sequences of hypothetical stipulations. The difference between the two cases is that while we knew by definition that the property quasi-encoded by the ordinary object was not part of its essence, this fact is precisely what we ignore when an abstract object quasi-encodes a property in contexts of hypothetical stipulation. Ignorance makes us mentally split between two intentional objects as a measure of cautiousness, while knowledge produces the same effect in case of ordinary objects.

Our critical point is that the Modal Axiom of Encoding captures logical features of encoding in relatively uninteresting intentional contexts, or at least in contexts that reflect only partially our actual dealings with abstract objects. When we consider possible encoding, as the antecedent of the Axiom invites to do, the Modal Axiom of Encoding concludes that we have pinpointed an abstract object which is in every situation as it is in this specific possible one. As soon as we have attached a property to an abstract object, it is true that we have defined it essentially. However this might capture a deep truth about the ontological nature of abstract objects, we are often led to consider abstract objects in a less static and more creative way, namely in contexts of discovery or inquiry, that is in contexts where possible encoding is precisely a case in point, still unsolved. In such contexts the Modal Axiom of Encoding must be weakened. However, as this axiom reflects a deeply entrenched intuition about the way abstract objects essentially have their properties, it is preferably complemented by

other principles describing the ways objects, both concrete and abstract, may hypothetically possess some properties.

Complementation of the Modal Axiom by principles of quasi-encoding is the most conservative way of preserving the basic distinction between the two modes of predication which tell apart abstract from ordinary objects in extensional and most intensional contexts. Quasi-encoding only applies in those contexts where predication either negates or putatively adds an essential property to a given object. As every property of an abstract object is essential to it, those contexts are typical of our creative and speculative relationship with abstract objects. In contexts where essence is negated or hypothetized, modes of predication to ordinary and abstract objects seem to collapse in a single one – quasi encoding – and to share modal behaviour – non necessity of the predicated property. The difference between abstract and ordinary objects in those particular contexts is primarily epistemic: we know the essence of an ordinary object in contexts of counteressential conceivability while we ignore the essence of an abstract object in contexts of hypothetical stipulation.

This finally suggests two far less conservative ways of accounting for the limited application of the Modal Axiom of Encoding in conceivability-contexts. One way is to contend that ordinary and abstract objects differ as far as epistemic differences arise in intentional contexts. Contexts of counteressential conceivability and hypothetical stipulation, under this contention, are paradigmatic, to the extent that a single mode of predication applies to both kinds of objects in these contexts while our knowledge of their identity may differ. A second way of revising the Modal Axiom of Encoding is to loosen up the connections between essence and intentional identity. If we lift the constraint exerted by essence on identity, we can accept the necessary consequent of the Modal Axiom of Encoding without presupposing anything about the identity of the agent's intentional object. This is, to a certain extent, what we have hinted at through our main argument, but we have avoided to vindicate the complete disconnection between essence and identity, by rather postulating, quite natural at our eyes, epistemic capacities to mentally keep track of more than one object at the same time.

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