Artifacts: Ontology as Easy as it Gets

Contents

Abstract

Amie Thomasson's Easy Ontology program is influential and attractive, but faces criticism for being too easy in a way that undercuts its realism by failing to recognize objects which don't fall under known kinds and generating spurious and duplicative objects by mere conceptual engineering. We suggest that restricting the Easy Ontology program to artifacts avoids these difficulties. We also propose an Easy Ontology-inspired analysis of *artifact* which cuts through the major extant objections to existing analyses. As Thomasson suggests, our special authorial role with regard to artifacts grants us privileged knowledge of them, which both disarms objections to Easy Ontology and allows a very easy ontology for artifacts. Easy Ontology and artifacts are made for each other.

1. Introduction

Amie Thomasson (2007, 2015)'s Easy Ontology program is a neo-Carnapian deflationary approach to existence questions. Ontology is easy on this view because the existence of Fs depends merely on whether F refers, i.e. whether the application conditions for the sortal concept F are met. Those application conditions, in turn, answer only to empirical discoveries or human purposes broadly speaking, neither of which is the special province of metaphysicians. Philosophy is to be genuinely analytic.[1] This approach of course requires that existing beings fall under some sortal F, so Thomasson adopts an Aristotelian insistence on highest genera: quantification is never bare, but can only range over some maximal genera.[2] Rather than treating *being* itself as analogous, however, she shares Quine's insistence on the univocity of quantification, so *being* and similar terms become mere *covering concepts* whose application conditions are disjuncts of the application conditions for some sortal concepts. Unlike other non-Quinean approaches to meta-ontology which insist on highest genera, the neo-Carnapian Easy Ontology program involves no quantifier variance.

More technically, Thomasson unpacks her understanding of quantification and genera with three definitions (see Thomasson 2007; Marschall 2021):

1. **Fundamental Categorical Quantification**
   Categorical quantification à la $[\exists x{:}K]\Phi$ is fundamental, and if we want bare quantification it needs to be built up using categorical quantifiers: $\exists x\Phi$ **iff** $[\exists x{:}F]\Phi$ *or* $[\exists x{:}G]\Phi$ *or* $[\exists x{:}H]\Phi$ *or* …

2. **The Sortal Constraint**
   Every element of the domain D falls under a sortal.

3. **The Hierarchy of Sortals**
   If F is a sortal (e. g. *mammal*) and G is some more specific sortal falling under F (e. g. *tiger*), then the application conditions for F will depend on the application conditions of the more specific sortal G (and the other sortals falling under F)

While Thomasson's ontology is supposed to be easy, and thus permissive, it is also supposed to be realist, and this is the source of most of its criticisms. Stephen Yablo (2000) speaks for many when he worries that it amounts to a kind of "hocus-pocus" pulling of a real existent rabbit out of a merely conceptual hat. Either the rabbit is created by the application of the concept or the rabbit is real and independent of the application of the concept. In the first case, Easy Ontology is just an unreal illusion because real rabbits are not made of concepts. In the second case, the rabbit's existence remains

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[1] "These matters are...open to...debate about...the correct analysis or explication of how our actual common term[s] work...These are important and interesting issues—but not issues that require any mysterious 'epistemically metaphysical' work" (Thomasson 2019).

[2] Marschall (2021) provides an admirably clear explication and defense of this view.

unknown until we do the work of "hard" ontology, because what is independent of the application of concepts cannot be discovered by merely conceptual analysis. Only a philosophical magic trick, say the critics, can make existence seem like a matter of concepts.

Whereas Thomasson defends Easy Ontology's realism and full generality, we intervene in this debate by defending a weakened version of Easy Ontology which applies only to artifacts. This artifactual version of Easy Ontology claims only that the existence of artifacts involves no further deep ontological questions over and above those already necessary for non-artifacts. Independently of whether Easy Ontology broadly construed is the right approach to metaphysical questions in general—an issue upon which we respectfully suspend our judgement (despite some reservations)—we think that its restriction to artefacts allows for a simple and elegant theory that avoids the complications of some of its main alternatives. Given the non-artifactual ontology, we take it that the further existence or non-existence of an artifact is an "easy" question in Thomasson's sense.

The plan of the paper is as follows: first, we propose application conditions for the concept *artifact*, then we show how the most common concerns about Easy Ontology are dissolved by the restriction to artifactual cases and how the most common concerns about analyzing *artifact* are dissolved by the Easy Ontology methodology.

2. Application Conditions for *Artifact*

In the Easy Ontology program, application conditions are devised by analytic methods beginning with ordinary language. Most dictionary definitions of *artifact* refer only to human production or modification, but this is at once too broad and too narrow. The classification is too broad, because babies, naturally shed skin cells, feces, human legs torn off by saber-tooth tigers, and the innumerable animals whose genetics have responded to human-caused climate change (or even hunting or habitat destruction earlier in the Anthropocene) are not thereby artifacts. It is too narrow, because it ignores the existence of ready-mades, where some members of patently artifactual kinds like tables and wine-racks are repurposed objects from the natural world without human production or workmanship. Thomasson herself (2003, 2014) follows many others by introducing productive intention to remedy these defects:

> Something is a member of an essentially artifactual kind K only if it is the product of a largely successfully executed intention to make a K, where the maker must have a substantive concept of the nature of Ks that largely matches that of some prior K makers (if any) and intend to realize that concept by making an object with K-relevant features.

Unfortunately, this attempt remains both over-broad and over-narrow. The classification is over-broad because babies and craps still qualify. It is over-narrow because it excludes production over-runs: every widget produced by a widget making machine is an artifact, even if the machine was supposed to be turned off sooner and so the last widget was not intentionally created. It also unduly excludes fortuitous prototypes: saccharine is a member of the essentially artifactual kind "artificial sweeteners" even though Constantin Fahlberg failed in his intention to make a compound radical of coal tar valuable for topical use, and had no concept of the nature of artificial sweeteners, which he did not intend to make.

We propose to treat *artifact* as a covering concept, where artifacts are all and only the members of artifactual kinds. We then delineate the application conditions for artifactual kinds contrastively, by deleting one of the two sources Thomasson gives for application conditions (empirical discoveries). Thus:

> x is an artifact if, and only if, x falls under a dominant sortal concept K and the application and co-application conditions for K respond only to human purposes.

A sortal is a concept which allows us to count the objects falling under its extension. A sortal is dominant when it is the best answer to the question "what is x?" Application conditions are the necessary and sufficient conditions for an object x to fall under the extension of K. Co-application conditions are the identity and count conditions that allow us to give the cardinality of the extension of K. Application and co-application conditions respond only to human purposes when the necessary and sufficient (meta-)conditions for them being the application and co-application conditions of K are entirely pragmatic.

The contrast here is with natural kinds, which are joint-carving and hence equally discoverable by all agents, no matter whether their purposes align with humans or not (though in cases like water, humans may discover and name them for distinctly human reasons). Our claim is that artifactual concepts are not like this: their application conditions cannot be stated without reference to human purposes, e.g. the application conditions for *bed* cannot be stated without reference to human sleeping requirements. Nonetheless, being responsive only to human purposes does not mean that the application conditions for artifactual kinds are arbitrary, or can be altered at will. First, humans are not omnipotent, so their purposes are not (generally) satisfied by mere acts of will. A pile of rocks can be claimed as a bed, but it will not make for a comfortable night's sleep. The individual who attempts such a concept application will remain frustrated, and the broader human community unconvinced. Second, according to the neo-Aristotelian tradition, evolutionary psychology, and other accounts which posit a fixed or semi-fixed human nature, human purposes themselves are not

mere matters of will. Someone whose back aches terribly cannot (generally) will the pain away, will away the desire to be pain-free, will herself to sleep, or will away the desire for sleep. Pragmatism may not be an adequate account of truth for all philosophical purposes, but it equally does not imply that anything goes.

The merits of this definition will become clear in section 3.2 below.

3. Easy Realism for Artifacts

As suggested in the quotation from Stephen Yablo above, the charge of anti-realism is the most significant objection to Easy Ontology. The objection comes in two flavors: Easy Ontology implies the existence of spurious objects and of suppressed objects. Both flavors of criticism, however, are blunted by restricting Easy Ontology to artifacts.

3.1 No Spurious Artifacts

As discussed above, one of the central claims of Easy Ontology is that quantification only ranges over the extension of a sortal. This raises the specter that gaining new concepts and/or adding sortal terms to a language by specifying their application conditions "can enlarge one's domain of quantification" (Thomasson 2015, p. 72). Benjamin Marschall (2021) worries that this implies a form of anti-realism in which our concepts and/or language creates the objects we quantify over, a view Thomasson wishes to avoid (2007, p.63ff., 185ff.). In the case of artifacts, however, this objection seems toothless. The objection cannot be that the object owes its existence to humans, since that is a general characteristic of artifacts. Nor can the objection be that the creation happens mentally or linguistically rather than by rearranging material components, given the well-explored concepts of ready-mades (Juvshik, 2021) and institutional artifacts (Thomasson 2003, 2019).

In the case of ready-mades, the first person to drop a flint pebble against another one in her hand and observe the spark might thereby gain the concept "fire-starting kit" and begin to possess one. 'Fire-starting kit' is the dominant sortal for the two stones because it is the best answer to the question 'What do you have in your hand?'. The answer 'Two stones', while correct, would be evasive. The two stones together meet the application conditions for 'fire-starting kit' because they are useful for starting fires on demand, and that application condition is responsive only to human purposes: lightning and lava are more effective at starting fires, but not controllable by humans. The co-application (identity/count) condition is also responsive only to human purposes: there are two stones, but only one fire-starting kit, because both are required for creating a spark. In the absence of humans who know how to start fires, there are no fire-starting kits, no matter how abundant flint may be. Flint stones are also not a necessary condition for fire-starting kits, as a bow and thimble will also

suffice. The potential variety of such kits can only be known with reference to human purposes, since the thresholds for time, reliability, spark intensity, etc., are dependent on human purposes. The ready-made artifact has been brought into being by some human enlarging her repertoire of concepts with an application condition responsive to human purposes, but it is no less an artifact for all that. An archaeologist who frequently spots pairs of flints or bows and thimbles together recognizes a civilization which has mastered fire.

A similar story should be told for the linguistic production of institutional artifacts. Someone holding wampum is holding an object under the dominant sortal *money*, not *shell*, and the application conditions for that sortal (medium of exchange, store of value, unit of account, …) are responsive only to human purposes. The co-application condition is also responsive only to human purposes: the extent of breakage that a shell can have while still counting as wampum depends on the prevailing social convention. In John Searle (2010)'s plausible account, such money is created by a *declaration* (a special kind of speech-act) and its *acceptance*, which together generate an institutional fact. The existence of money, thus entirely supervenes on human thought and history, yet Searle is nonetheless giving an explicitly realist (indeed purely descriptive) rather than anti-realist account of money. The institutional artifact has been brought into being by human speech ordering shells for human purposes, but it is no less an artifact for all that. An archaeologist who frequently spots large quantities of such shells together recognizes a civilization which has mastered commerce.

Fire-starting kits and money are both artifacts, no less than pots and arrowheads. None of the four would exist without humans, and the first two can be brought into being purely by human development, conceptual and linguistic. Yet all are very real, and can be grounds for immediate recognition of a particular civilization. As long as the relevant application conditions are met, realism is no barrier to the conceptual and linguistic origins of artifacts. Artifacts generated in this way cannot be spurious like phlogiston or electric fluid. The application conditions for artifactual kinds can change as human purposes change — wampum is not *now* money, but it *was*, because the application conditions for money *were* fulfilled, and almost unerringly so, given the close epistemic connections human agents have with artifacts (Thomasson 2003). Empirical discoveries (e.g. carbon dating) can shed light on whether the application conditions were *met* (e.g., humans could never have used a shell in a pre-Cambrian layer for money), but they cannot change what the application conditions *were*. Those are analytic, given by the meaning of the concept for the relevant civilization.[3]

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[3] Whether a Robinson Crusoe civilization-of-one is possible, with consequently unique artifact kinds, depends less on your view of ontology and artifacts than on your view of whether Wittgenstein's Private Language Argument excludes private concepts (see Ayer & Rhees, 1954)

3.2 No Suppressed Artifacts

In addition to the threat of spuriously attributing existence, realists must also avoid the equal and opposite error of failing to attribute existence when it is warranted. Marschall (2021) provides two tests for this error: the *counterfactual test* and the *Hamlet test*.

The *counterfactual test*:

> For a view to be realist, it needs to make counterfactuals such as the following true:

> (C) If there had been no minds in the universe, there still could have been tables.

Marschall argues that the counterfactual test is quite weak and, thus, unproblematic for Easy Ontology, because, on the standard semantics, we evaluate the situation in the counterfactual world by employing the concepts of the actual world. In the case of artifacts, however (like tables, *pace* Marschall), the counterfactual test is actually too strong. Naturally, tables do not exist in universes without any agents! The application conditions for *table* are relative to human purposes. The Easy Ontology program, thus, will have to check the concepts that exist in the same worlds as the situation to be evaluated — and this is entirely reasonable, since, according to Easy Ontology, there are no situations absent concepts: to exist *is* to fall under a sortal concept. The situation in the target world cannot be described in a concept-neutral way to see if our concepts apply, and to describe the other world in terms of our concepts is to preclude the question of whether ready-made artifacts have come into being there. If we read the counterfactual test this way, though, Easy Ontology becomes anti-realist about natural kinds. But there is no such problem regarding artifacts. No Easy Ontology reading of the counterfactual test seems to work for both artifactual and natural kinds, and Easy Ontology seems better adapted to artifacts as discussed in the next sections. This is a good enough reason to restrict Easy Ontology to artifacts.

Marschall's *Hamlet test* (adapted from Korman 2019, p. 241) for realism is:

> (H) There are objects which do not fall under any sortal.

This forces Easy Ontologists to decide whether the sortal-constraint on quantification is about the sortal *predicate* or the sortal *concept*. If the sortal-constraint is about *predicates*, then there is a straightforward contradiction with (H), leaving Easy Ontology anti-realist. Easy Ontologists should thus read the sortal constraint on quantification as concerning *concepts*, which can always be introduced as predicates by specifying their application conditions. Since the actual introduction of such predicates need never exhaustively occur, Easy Ontology can meet the Hamlet test for realism. Marschall suggests that the introduction of novel sortal predicates creates a new problem for Easy Ontology, however. Predicates come not only with application conditions, but also with co-application

conditions and "other constitutive rules of use" (Thomasson 2015, p. 225). The problem is that, if such other constitutive rules are arbitrary, then newly introduced sortal predicates will not have to fall under any particular more general sortal. If the constitutive rules are governed by the more general sortal, on the other hand, this will contradict Easy Ontology's claim that the application conditions flow from the most particular sortals to the most general, as demanded by Hierarchy of Sortals.

A version of Easy Ontology with its sights lowered to only artifactual cases need not worry about the Hamlet test. First, our definition of artifacts implies that all artifacts fall under an artifactual sortal, so any objects which do not fall under a sortal cannot be artifacts. Such non-artifacts may not be subject to Easy Ontology on our account, so they need not obey the Hierarchy of Sortals. Thus even if H is true in its full generality, it need not concern our restricted version of Easy Ontology. Furthermore, the introduction of novel artifactual sortal predicates can involve arbitrary constitutive rules without being worrisome for realism. We may be surprised or even appalled to find out that a Jaffa Cake is not a biscuit, or that a PT Cruiser Convertible is a truck, due to the seemingly arbitrary constitutive rules for these categories (e.g. texture of the dough before baking and after going stale; flat load floor), but this does not impinge on the reality of Jaffa Cakes, cakes, PT Cruiser Convertibles, or trucks. These are artifactual kinds, so their application conditions respond to human purposes, and the purposes of Her Majesty's Customs and Excise and the US National Highway Traffic Safety Administration lead those relevant authorities to decree these application conditions (see Burge 1979).

4. Easy Artifactuality

While restricting Easy Ontology to artifacts makes the method much more plausible, it also has significant benefits for resolving various difficulties in the philosophical literature on artifacts, which fall into three broad classes. First, the difficulty of whether and how unworked, merely "ready-made," "appropriated," or "found" objects count as artifacts. Second, the difficulty of how artifacts, which seem to be material objects, can nonetheless behave in ways surprising for material objects because they obey human rather than physical laws. Third, the difficulty of how prototypes and failed attempts can count as artifacts when they may not obviously be members of any artifactual kind.

4.1 Appropriation

Our definition of an artifact means that artifacts are brought into being by falling under the right kind of dominant sortal concept, an artifactual kind. There are, then, three ways in which an artifact can come into being under this definition:[4]

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[4] These options are also all allowed by the somewhat different analysis in Thomasson (2014).

1. Human purposes can change the application and co-application conditions for a sortal concept K in such a way that an object x which did not previously meet those conditions now does, and K is the dominant sortal for x (*conceptual* engineering).

2. Humans can create or alter an object x in such a way that the application and co-application conditions for a sortal concept K are now met, and K is the dominant sortal for x (*ordinary* engineering).

3. Nature can create or alter an object x in such a way that the application and co-application conditions for a sortal concept K are now met, and K is the dominant sortal for x (*natural* engineering: see Ennos 1998).

The frequency of (1) will obviously depend on the difficulty of conceptual engineering. Perhaps such conceptual change is so rare and difficult to control that it does not deserve the title of "engineering" at all. But even if it is possible, it is obviously difficult (Cappelen 2018). Culture and language are relatively stable, such that the application and co-application conditions for kinds do not change too frequently. While we think that (1) is a possible way for artifacts to come into being, it will be a relatively rare one.

Option (2) is obviously the normal and uncontroversial way for artifacts to come into being, whether by handwork or industrial mass production. While other animals may have only a few concepts and/or only rarely alter the natural world to match their concepts, since the emergence of *homo habilis* some 2.3 million years ago, humans and their ancestors have clearly had a rich repertoire of concepts and engaged in the routinized manufacturing characteristic of the Oldawan stone tool industry and its successors.

Option (3) is also controversial, with many recent analyses of artifacts (e.g. Evnine 2016) denying that such ready-made, appropriated objects should count as artifacts, or insisting that appropriation must involve at least some incidental physical modification such as change of place. Our analysis, by contrast, is receptive to the arguments of Juvshik (2021) in favor of treating e.g. ersatz driftwood wine racks as genuine instances of the artifactual kind *wine-rack*. This is in line with the general Easy Ontology approach: artifacts are clearly objects which respond to human purposes, and human purposes are generally more concerned with the use of an object than with its (possibly unknown) history of production.

Nevertheless, our account can give a specific analysis of why option (3) should occur relatively rarely, rather than letting every large piece of driftwood buried in the sand 100 meters offshore count as a table. The key element of this analysis is that for an object to count as an artifact on our definition, the artifactual kind responsive only to human purposes must be its *dominant* sortal. For a piece of

driftwood that is being used as a wine-rack in a home, the clear best answer to the 'What is it?' question involves appealing to the artifactual kind *wine-rack*. The mention of "drift-wood" comes in secondarily, as the material or origin of the piece. For a piece of drift-wood that is being used as a table on the beach, the issue might be more ambiguous. Customary and consistent use of the piece of wood as a table might make *table* its dominant sortal kind, but more happenstance usage might determine the answer 'a piece of driftwood' as a more natural response, with its usage as a table being deemed secondary. For the pieces of driftwood which are the right size and shape to be wine-racks or tables but are buried offshore, their discovery by laser mapping of the littoral would not generally lead to the claim that wine-racks or tables had been discovered. Yet if there were evidence of a culture having previously used them habitually as such, that might change the judgment of archaeologists. And if there were an extremely high-priced market for such found objects, that might change the judgment of treasure hunters. In such cases, the discoverers might respond to the discovery of the same object with a label referring to different dominant kinds. Again, this should not surprise us if we accept the general Easy Ontology picture by which some kinds can be responsive to human interests. The dominant kind constraint can thus do justice both to the intuition that some artifacts are merely ready-made, appropriated objects, and the intuition that merely meeting the criteria for appropriation is not the same as having been appropriated — without lending appropriation any particular physical significance. Human purposes and intentions are involved in all three kinds of artifact creation, but the intention to produce involved in ordinary engineering is only one way artifacts come into being.

4.2 Materiality

Dean Zimmerman (1995, 2002) poses another puzzle for socially motivated accounts of artifacts such as ours. Many artifacts seem to be material objects, like hand-axes, wine racks, boats, and trains. We thus expect them to obey ordinary physical laws, like the prohibition on superluminal motion. Surely if a natural object like a rock cannot be moved at superluminal speeds, neither can a train, and the mere appropriation of a piece of drift-wood as a wine-rack cannot make any difference. Yet given option (1) above for how artifacts come into being, these intuitive results will not always hold. Co-application (identity/count) conditions are responsive to human purposes, and human purposes will sometimes decree that the train *Orange Blossom Special* has moved from Miami to New York, not by the ordinary material process of rolling along steel rails, but rather by the breaking down of a locomotive in Miami and a legal agreement that a newly finished locomotive in New York is the *Orange Blossom Special* so that the next trip can run southbound in accordance with snowbird demand. This legal arrangement is obviously unphysical, and so need not be bound by physical laws, in contravention of our intuitions that artifacts like trains are material objects.

Easy Ontology, however, gives us a natural way out of this conundrum. Recall that every object must fall under a sortal. For Thomasson, reference is not even possible without sortals due to the *qua* problem — we can be referring to many different things when we say *Orange Blossom Special* and gesticulate, unless we have some particular sortal in mind. One way out (Thomasson 2007, 38n15) is to construe this sortal concept as an immaterial part of the thing referenced. In this case, there are no purely material objects, and the problem is dissolved. This approach, however, might seem too costly. Thus, a narrower response would be to ask about the sortal *material object* itself: is this sortal concept artifactual (with application and co-application conditions responsive only to human purposes) or not?[5] If *material object* is an artifactual sortal, then, by definition, its application conditions cannot be constrained by empirical discoveries, which do not answer to human purposes. On the other hand, if *material object* is not an artifactual sortal, then it cannot be predicated of all artifactual sortals like *train*. The train *Orange Blossom Special* may have moved superluminally, but no material object (e.g., a hunk of iron) did so. Furthermore, when we gesticulate at some supposed object and ask whether "it" traveled superluminally, at pain of the *qua*-problem we must have some sortal kind in mind, whether train or hunk of iron. Whichever one we have in mind gives the appropriate results, resolving the puzzle.

4.3 Prototypes & Failures

The third common dispute in the artifactuality literature is how to handle prototypes and failures, which seem artifactual without clearly belonging to any artifactual kind. Our theory allows these objects to count as artifacts via any of the three methods outlined above. In ordinary engineering, the application and co-application conditions for some kind concept K are identified in advance of making or altering some x such that it is the first object to meet those application and co-application conditions. This will create an artifact via process (2). Sometimes, x will fail to meet those application and co-application conditions, as when Spencer Ferguson Silver III intended to create a glue in 1968 or Thomas Alva Edison attempted to create an incandescent light bulb in 1878. In Edison's case, a sortal similar to *light-bulb* would still be required to provide a dominant sortal for a complex assemblage of platinum wire, glass vacuum chamber, and other elements. Perhaps the sortal *light-bulb experiment* where the only application condition is that the device shed light on what filaments are workable for light bulbs. A museum might thereby naturally count its collection as containing several early light bulbs along with several light bulb experiments which were not themselves light bulbs. There may be vague cases if the application conditions (light generated, or time before burnout)

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[5] Assuming that *material object* is a sortal at all, with proper application and co-application conditions, and does not fall victim to Thomasson's arguments against *thing*.

are themselves vague, but this seems unproblematic. In Silver's case, however, the produced acrylate copolymer microspheres meet natural kind criteria, even though they failed to meet the application conditions for any artifactual kind. In 1974, Art Fry recognized a human purpose for "repositionable pressure-sensitive adhesive" and that the application conditions for "glue" should be expanded accordingly. Since Silver's acrylate copolymer microspheres met these new application conditions, an artifact came into being by process (1). If a naturally-produced deposit of such microspheres were found, it would constitute an artifact via process (3).

The status of prototypes and failures will thus be very sensitive to the current application conditions for concepts, as one would generally expect in Easy Ontology. Some failures will straightforwardly meet the application conditions for some dominant natural kind sortal; others will require a complicated concept in order to account for their dominant sortal; still others may have no dominant sortal at all given their utter failure, and may only class as a kind of random heap of components. Once vagueness is added to the account, this seems like an adequate typology for the range of possible failures, and the possible complex interplay of conceptual and ordinary engineering in prototype production.

4. Conclusion

As Thomasson (2003) suggests, humans are in a privileged position with respect to knowledge of artifacts. This privileged position both ensures that artifacts never exist outside of our sortal concepts, preserving realism, and that human action (including conceptual engineering) can indeed create new artifacts and artifact kinds. Since conceptual engineering is possible, there is no difficulty with ready-made, appropriated artifacts—yet since conceptual engineering is difficult, such artifacts will not be common. Since concepts are integral to artifacts, puzzles about their materiality are dissolved. And since ordinary and conceptual engineering can have a complex interplay, puzzles about prototypes and failures are also resolved. Restriction to artifacts has avoided the most serious issues for Easy Ontology while Thomasson's program easily carves through the extant ontological difficulties around artifacts. Nonetheless, advocates of Easy Ontology may be hesitant to consider this restriction a friendly amendment. Artifacts rely on non-artifacts for their production, so "hard" ontology cannot be avoided altogether if Easy Ontology only works for artifacts. Still, we think that Easy Ontology provides a natural and account of artifacts which should be attractive on its own merits. Artifactual ontology is as easy as ontology gets.

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