Function Essentialism about Artifacts

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1. Introduction

We are all familiar with many kinds of artifacts: pencils, cellphones, chairs, and intercontinental ballistic missiles. We also all have an intuitive understanding of what artifacts are – they are things made by humans, that would not otherwise occur in nature. But there is an important philosophical question about artifacts that has proven particularly difficult to answer: What makes something an artifact? Or, in more metaphysical terms, what are the essential features of artifactuality?

Given that artifacts are things made by humans, they at least seem to be importantly intention-dependent. Thus, one prominent suggestion is that the intentions of artifact makers (at least in part) constitute their essences. That is, for something to be a chair, say, requires that it be the (successful) product of an intention to make a chair. Artifacts like chairs don't occur naturally, they are the end result of a directed and successfully executed intention to make something of that kind and thus depend on the intentions of their makers. But we can't make something of a given artifact kind *just* by intending to make something of that kind. If I push a bit of dirt into a little pile and claim I've made a chair, then I haven't succeeded in making a chair.[1] As the little pile of dirt shows, the dependence of artifacts on the intentions of their makers seems necessary, but not sufficient, for artifactuality. What could be added to intention-dependence to yield jointly necessary and sufficient conditions for being an artifact?

A pre-theoretical view on this question is what we can call *function essentialism about artifacts*. Function essentialism about artifacts is the conjunction of two component conditions: (1) the view that each artifact has a certain function (or perhaps more than one), without which it would not be an artifact, and (2) that membership in an artifact kind is determined by a particular, shared function. Function essentialism is widely held as a plausible and intuitive view about artifacts and it appears to be borne out by our practices: we make artifacts *for* something, we reuse them *for* something else, we throw them away or recycle them when they are no longer able to serve in their intended way or when we have no more use for them, generally. Moreover, we seem to group artifacts into kinds based on the functions they are intended to have: chairs are for sitting, shoes are to protect one's feet when

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[1] This example is from Paul Bloom (1996).

walking, knives are for cutting, bicycles are intended as personal, individually powered transportation, cameras are for imprinting an image onto a photosensitive surface, and so on. Despite this intuitive pre-theoretical appeal, upon theoretical reflection it may seem susceptible to easy counterexamples, as we will see below. Nonetheless, it's important to show how and why it's false, since it is surprisingly widespread amongst philosophers.[2] Thus, the main aim of this paper is to show that function essentialism about artifacts is false. Along the way, I also aim to accomplish two other, auxiliary tasks: (i) to consolidate the rather hodge-podge discussion of function essentialism as it appears in the literature, and (ii) to formulate function essentialism, for the first time, in a clear and precise way. While I'm treating function essentialism as the conjunction of (1) and (2), above, along the way I'll consider ways to hold (1) without (2), as well as ways to weaken (2) to make it more plausible.

The paper is structured as follows. In section 2 I formulate the function essentialist view by explicitly formulating the two component conditions. In section 3 I argue against the first condition and consider a compelling response from Randall Dipert while offering a reply. Section 4 offers counterexamples to the second condition and considers a response from Simon Evnine and offers a reply. In section 5 I consider – and reject – an alternative response that involves restricting function essentialism to so-called technical artifacts, defended by, among others, Lynne Baker. I conclude in section 6 by gesturing towards what I take to be the correct approach to artifact essences. This paper thereby shows that the commonly held but infrequently defended assumption that artifacts are essentially functional objects should be rejected. Thus, whatever the correct metaphysics of artifacts and regardless of whether they have essences or not, they don't have *functional* essences.[3]

Before proceeding, it's important to note that there are multiple notions of function and accounts differ on which are central.[4] In general, we can understand functions as what a thing is *for*. Intuitively, the heart is for pumping blood, a chair is for sitting, wings are for flying, and pens are for

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[2] Function essentialism is held explicitly or implicitly by, among others, Davies (1991, 126), Dipert (1993, ch. 2), Eaton (2020, 3ff.) Elder (2007, 38-40; 2014, 28-33), Franssen and Kroes (2014, 78-79), Grandy (2007, 27-29), Houkes and Vermaas (2004), Hughes (2009, 179ff.), Iseminger (2004 ch. 5), Keleman and Carey (2007, 214ff.), Kornblith (1980, 2007), Kroes and Meijers (2006), Levinson (2007, 77), Mag Uidhir (2013, 40-42), Margolis (1980, 90-91), Parsons (2019, 156ff.), Preston (2013, 152ff.), Searle (1995, 13-23), Soavi (2009, 188ff.), Vega-Encabo and Lawler (2014, 122-123) and in a qualified sense by Baker (2007, 52-53; 2009), Evnine (2016, 119-129), Grafton-Cardwell (forthcoming, fn. 13), Houkes and Vermass (2004, 2009, 2014), and Lowe (2014, 25-26). Olivero (2019) takes intended function to be necessary but not sufficient for being an artifact while Stecker (2019, 21) takes it to be sufficient but not necessary.

[3] For a general overview of the literature on artifact functions and functional essences see Preston (2009) and Olivero (2019). For general discussion of the debate about artifact essences see Koslicki (2018, ch. 8).

[4] See Wright (1973) for a number of disambiguations. See Millikan (1984, 1995, 1999), Cummins (1975), Preston (1998, 2009, 2013), Searle (1995), McLaughlin (2001), Wright (1973), Griffiths (1993), Soavi (2009), Vermaas and Houkes (2003), Hansson (2006), and Scheele (2006) for different accounts of functions.

writing.[5] In the case of artifacts, we can distinguish between standard and accidental functions: the standard function of a chair is to seat a single individual, while an accidental function of that same chair may be as a doorstop.[6] Function essentialism holds that the chair is an *artifact* and a *chair* in virtue of being for seating a single individual, but it's an open question whether it's also a *doorstop* or can be merely *used as* a doorstop. The function essentialist needn't take a stand on the latter issue, but the former claim involves the *intended* function of the chair, where the intentions of the maker or designer determine the artifact's function. In what follows, I will assume that function essentialism is a claim about the intended functions of artifacts and artifact kinds.

2. Formulating Function Essentialism

The general idea behind function essentialism is the idea that (1) artifacts are functional objects and (2) artifact kinds are categorized by a shared function. Both component conditions are motivated by pre-theoretical considerations of our practices surrounding artifacts, and are thus *prima facie* plausible and widely held. Additionally, philosophers widely hold both conditions as an account of the essences of artifacts and artifact kinds. While these conditions are usually held together, they can come apart. One could hold (1) but reject (2), thereby taking artifacts to have some function but denying that artifact kinds are specified by a unique, shared function. However, if one holds (2) then (1) seems to follow since if all artifact kinds are determined by a shared function, then all members of all artifact kinds have a function. This inference holds if one plausibly assumes that all artifacts belong to some artifact kind. That is, there are no 'bare' artifacts that aren't either a chair or a knife or a bicycle or shoelace or whatever. Thus, if being an artifact of some particular artifact kind entails having a function associated with that kind, then it follows that all artifacts have a function.[7]

Before evaluating the two conditions of function essentialism, we should formulate them explicitly – something not often done by the philosophers who adopt them. (1) is a claim about being an artifact and I take it that what (1) is driving at is that all artifacts have some function or other, so that, to be an artifact, something must have a function. We can formulate (1) semi-formally as follows:

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[5] There's disagreement about whether a unified account of biological and artefactual functions can be given. See the papers in Kroes and Krohs (2009).

[6] The terminology of standard/accidental is from Vermaas and Houkes (2003, 262-266) and is sometimes referred to as *proper* and *non-standard* or *maker/designer* and *user* functions. Evnine (2016) calls them kind-associated and idiosyncratic functions. Details differ slightly on how to understand this distinction, but they aren't germane here.

[7] I know of no one who holds (2) but denies (1), mainly because of the usually tacit but almost universal assumption that all artifacts belong to some artifact kind.

(1) *Artifact Condition:* Necessarily, for all x, if x is an artifact, then there's some function F such that x has F.

Thus, necessarily, for anything that's an artifact, there's some function that it has.[8] This is, of course, compatible with an artifact having multiple functions. The requirement is that artifacts have at least one function. For example, the chair I'm sitting on has the function of (somewhat) comfortably seating a single person. The function of my watch is to track and display the time. The function of my water bottle is to hold a liquid and disperse it for consumption. The function of my pad of sticky notes is to provide a surface for writing on that can be easily attached, detached, and reattached from other surfaces. And so on for every other artifact. Some artifacts, such as Swiss Army knives and cellphones, have multiple functions.

Giving a very generic functional description is easy for most artifacts, e.g. this car is for transporting persons from one place to another. But specifying what *exactly* the function is for any given artifact can be quite difficult. This will often include reference to *how* the artifact is supposed to perform its function. For example, my digital watch is intended to track and display the time *in this particular way*, i.e. digitally, as opposed to my analog watch, which does so with three hands moving along a watch face. Similarly, a screwdriver is for attaching things together in conjunction with suitably shaped screws and the application of pressure *in this particular way*; pushing on the screwdriver from the end isn't how it's supposed to function. (1) doesn't say anything about how to individuate the function F that any given artifact has and for present purposes we can set that issue aside. What matters is that if something is an artifact, then there's some function that it has, something that the artifact is *for*, regardless of how exactly one specifies that function.

(2) is a claim about artifact kind membership. At least the initial, pre-theoretical motivation behind (2) is the idea that, as Kornblith says, "at least for the most part, it seems that what makes two artifacts members of the same kind is that they perform the same function" (1980, 112). What makes these two things chairs? They're both for sitting a single person. As stated, this just offers a sufficient condition on artifact kind membership. However, Baker argues that a shared function is also necessary: "for each artifactual primary kind, there is a proper function such that the bearer of that artifactual primary kind necessarily has that proper function (indeed, the general term for an artifact – e.g. polisher, scraper, life preserver – often just names the proper function of the artifact). Thus, an artifact

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[8] Fine (1994) has argued that we should distinguish between necessary and essential properties of an object. Cases where it's important to distinguish them aren't relevant to function essentialism, so I treat necessity and essentialist claims interchangeably.

has its proper function essentially" (2007, 51-52). We do seem to categorize artifacts by their function. Subkinds of artifacts such as *utensil*, *chair*, and *car* seem to group together artifacts based on what they are for. That is, something is a chair if it is for what chairs are for, i.e. comfortably seating a single person. Similarly, something is a bottle opener if it's for opening bottles. There are many different ways to open a bottle and concomitantly many different kinds of bottle opener including leveraged beer and soda bottle openers, fitted twist-off bottle openers, winged, pull-up, pull-out, and electronic corkscrews, and two-pronged cork pullers. However, they're all *bottle openers* in virtue of sharing the function of being for opening bottles. Thus, it's natural to think that nothing else has this function which is not also a bottle opener, since as Baker remarks, many artifact kind terms like 'bottle opener' just name the associated function. (2) thereby involves two components: the claim that all artifact kinds are determined by a particular function shared by all members and that the function which individuates the artifact kind is unique to that kind. (It might immediately strike some readers that the sufficiency of this condition is highly suspect; I will return to this issue in section 4).

We can therefore formulate (2) as follows:

(2) *Kind Membership Condition:* Necessarily, for all artifact kinds K, there is some function F which all and only members of K have.

Thus, the unique function F associated with K provides both a necessary and sufficient condition for being a K, so concomitantly, there's nothing that has F which is not a K. According to (2), any artifact kind which we substitute for K will be individuated by a unique function. For example, nothing that doesn't have the function of opening bottles is a bottle opener and anything with the function of opening bottles is a bottle opener. This correctly groups all different kinds of bottle opener together as bottle openers.

Note that function essentialism needn't aim at giving an exhaustive list of the essential features of artifacts. Indeed, (1) only offers a *necessary* condition on artifactuality, since biological kinds like organs have functions. The functions of interest also aren't just any old function an artifact can perform but the ones they were made for, i.e. their *intended* function. As Baker notes, "what proper function an artifact has determines what the artifact most fundamentally is – a boat, a jackhammer, a microscope, and so on. And what proper function an artifact has is determined by the intentions of its designer and/or producer" (2007, 52). Cars can certainly function as juicers by running over oranges, but intuitively that's not what they're for (as it happens, this is a very inefficient way to make orange juice). Cars are made with the intention to serve as a means of transportation. The functions

at issue in (1) and (2) refer to such *intended* functions. Thus, just because it's physically possible for some artifact to serve some function F, this doesn't entail that that artifact has the function F.

Moreover, almost everyone who adopts function essentialism also adopts some version of Ruth Millikan's (1984, 1995, 1999) account of *proper functions*.[9] According to Millikan, an entity's proper function is what that thing is *for* as determined by its history of selection and reproduction. Proper functions can be had in one of two ways: either direct or derived (Millikan 1995, 13-14). An item has a direct proper function when it's produced because past items had and successfully performed that function and were thus *re*produced because of that success. For example, say a particular visual system is good at detecting movement in its periphery, so the organism is good at detecting and evading predators, which gives the organism a better chance of survival and thus a better chance of reproducing. As a result of successful reproduction that particular visual system is reproduced *because* previous visual systems like that were successful at detecting peripheral movement. That visual system is thereby *copied* from previous members of the kind. Similarly, cars have the function of transportation and they are reproduced because previous cars were successful at performing that function.

Some items have *derived* proper functions which result from the functions of the items that produce them. Cases of prototype artifacts fall under this category. Intuitively, a prototype still has a function, presumably based on its maker's intentions. But that function cannot be established by a history of production since *ex hypothesi* they are the first members of their kind. The function of such artifacts derives from the intentions of their makers. To use an example from Thomasson (2007, 57), the proper function of a desire for food is to gain nourishment for the organism. In a particular environment, that desire may lead someone to invent a new kind of hunting tool which acquires the proper function of gaining nourishment for the organism from the intentions of its maker.[10]

Going forward, I'll assume that the functions at issue in (1) and (2) are proper functions, except where others adopt an alternative account. It seems that, as formulated, (1) and (2) capture the intuitive ideas behind function essentialism as both a condition on being an artifact and as a condition on being a member of a particular artifact kind. However, despite being widely held, it may seem that (1) and especially (2) are susceptible to easy counterexamples. In the next two sections I offer various counterexamples to each condition and consider replies on behalf of those sympathetic to function essentialism.

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[9] Differences between theories of function lie in how much emphasis they place on the role of intentions. Millikan falls in the middle, with an account that involves both intentional and non-intentional elements. For an extremely useful overview of theories of artifact function, see Preston (2009, 218-227).

[10] For a criticism of function essentialist accounts and prototype artifacts see Vega-Encabo and Lawler (2014).

3. Problems with the Artifact Condition

Function essentialism involves two component theses, the artifact condition and the kind membership condition. We formulated the artifact condition as:

(1) *Artifact Condition:* Necessarily, for all x, if x is an artifact, then there's some function F such that x has F.

On its face, (1) really does look plausible as a condition on artifactuality. Most of the things immediately around us tend to be artifactual and moreover, we can readily identify a function for almost every single artifact we surround ourselves with (unsurprising, since we usually acquire artifacts for some specific purpose). Further, we often identify things *as artifacts* (or as "man-made") by recognizing both their intention-dependence and their intended function. Anthropologists and archeologists initially identify artifacts by the appearance of intentional design and infer that such a design was for some purpose. In quotidian contexts where we encounter an unfamiliar artifact, we often learn what it is by learning what it's function is. For example, I may come across a rheostat and only have some vague idea what it's for (perhaps in virtue of its shape or structure) but I come to know that it's a rheostat and what rheostats are by being told that it's a variable resistor used to control electrical currents.[11] Yet despite any seeming plausibility of function essentialism, there are counterexamples to both conditions.

Regarding (1), a natural place to look for counterexamples are the arts. Many people have the idea that art, especially modern or conceptual art, isn't *for* anything but is instead 'art for art's sake'. Since the functions at issue in function essentialism must be *intended* functions, then it seems possible that an artist could make an artwork while intending it to be useless. Duchamp's *Fountain* could fall into this category as could John Cage's *4'33* or one of Rothko's paintings or indeed anything that a lone artist might make in her studio – she simply intends to make something that serves no purpose.

Of course, this isn't to say that all art lacks a function, nor even that art lacks a function particular to art. As Michael Baxandall (1972) has argued, much Renaissance art had an explicit religious function, such as facilitating religious reflection and obeisance. Other artworks may have explicit representational, expressive or communicative functions (such as Leni Riefenstahl's *Triumph of the Will* as Nazi propaganda) and like the case of a baker and loaves of bread, an artist may make art

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[11] This example is Kornblith's (2007, 143).

as a source of income. Despite the many cases of functional artworks, it seems clear that an artist can make an artwork that doesn't have any function at all. The lone artist in her studio seems like the paradigm case: she intends to make an artwork but doesn't intend it to be *for* anything – it's a conceptual or appropriational piece – except to be art. But *being art* doesn't seem like a *function*, it's a kind of artifact. Consider a fictional example: Homer Simpson, in "Mom and Pop Art".[12] Homer attempts to build his own backyard barbecue, fails spectacularly, and attempts to throw away the resulting mass of concrete and barbecue parts, only to have it damage the vehicle of a museum curator who then suggests that he display the piece as a work of *outsider art*. The artwork certainly isn't *for* anything – it resulted from Homer's failure to make a barbecue.

With the advent of modern and conceptual art, this kind of case seems increasingly common. One can understand certain artistic developments in the early to mid-twentieth century as expressly eschewing functional artworks. Many artists, especially the Dadaists, were rebelling against institutionalized artistic traditions which took art to have a certain function, such as representation or emotional expression or in some cases political propaganda. In the case of Dadaism, it was a reaction against the allegedly rational and justified carnage of World War I. Instead, they intentionally made art that was irrational, absurd, or merely 'art for art's sake'.[13] Later developments in conceptual art likewise often aimed at making purposeless art.[14] In case it's objected that all art has a function in virtue of being a source of income for the artist, we can note that the lone artist in her studio need not, and often does not, make art for public consumption (part time artists who make art as a hobby often fall into this category).[15] Art isn't necessarily produced in the current capitalist institutional and curatorial art complex. Thus, it seems that many artworks lack a function. Since artworks are artifacts, these cases are counterexamples to (1).[16]

One way to resist these counterexamples to (1) is to argue that there is a distinct *artistic* function that all art has in virtue of being art, and thus the above examples do have a function, whatever this artistic function may be. The main problem with this approach is identifying a uniquely artistic

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[12] *The Simpsons*, Season 10, Episode 19 (Moore, 1999).

[13] See Trachtman (2006) for discussion of the Dadaist movement and how it developed as a reaction to the First World War, although some Dadaists had express political goals with their art. See Wilcox (1953) for a history of the idea of 'art for art's sake', which he traces back to the early 1800's as stemming from a bad misreading of Kant.

[14] John Cage, for example, describes his work *4'33"* as purposeless (Griffiths 1981, 124). But see Dodd (2018) for a different take. Duchamp's ready-made can also be understood in this way. For a discussion of Duchamp's *Fountain* in particular, see Evnine (2013). *Fountain* has a purpose *as a urinal*, but *as an artwork* (described by Duchamp himself as a sculpture), it lacks a function, or at the least lacks the function common to urinals.

[15] One suggestion from *The Simpsons* episode is that to be a *professional* artist one must have sold at least one artwork.

[16] Even if one denies that *all* artworks are artifacts, there are clear cases of artworks that are artifacts and that lack a function.

function that is common to all artworks. There's a long history of attempts to give functional definitions of art, with art's function being variously identified as representation, emotional expression, cognitive engagement that yields new insights about the world, or aesthetic success. The litany of artworks is vast and none of these putative artistic functions are had by all artworks, so the main difficulty with functional accounts of art is that they're not extensionally adequate. For example, Robert Barry's conceptual works, such as *Inert Gas: Helium*, offer new insights about the world but involves no aesthetic engagement or appreciation. Rothko's paintings are aesthetically successful but aren't representational. Vivaldi's works are emotionally expressive but often don't require cognitive engagement. Warhol's *Brillo Boxes* are representational and require cognitive engagement but don't express emotion. Examples can easily be multiplied. Moreover, given the variety of art forms, we shouldn't expect that they all do or aim to do, the same thing. Dance, poetry, film, opera, music, ceramic art, sculpture, theatre, and photography are very different kinds of art. Unsurprisingly, then, there's no obvious candidate for a distinctly artistic function that all art has.[17]

Even if one goes in for a functionalist account of art, there are non-art artifacts which lack a function, and thereby the counterexamples to (1) don't rest exclusively on artworks. Examples include doodles drawn during a boring faculty meeting or casually constructed paperclip sculptures.[18] *Prima facie* such things both seem like artifacts (they're intentionally constructed objects, after all) and don't have a function. Indeed, what would a doodle be *for*? There doesn't seem to be a readily identifiable function. Similarly, Risto Hilpinen suggests that "a person may intentionally cut a triangular figure from a piece of cardboard without any further purpose. Such an object can be regarded as an artifact on the ground that it satisfies (or is accepted as satisfying) a type-description ('triangular figure') which was part of the agent's intention" (1992, 63). Hilpinen seems right to claim that such a cardboard cut-out would count as an artifact because it was intentionally made by some agent and the agent succeeded in executing their intention, even though they didn't make the triangular cardboard cut-out for any further purpose.[19]

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[17] The most common functional accounts of art are aesthetic theories, but they face trenchant difficulties with conceptual art. For representative accounts, see Iseminger (2004) and Grafton-Cardwell (*forthcoming*). See also Stecker (1997) for a different functionalist approach and Gracyk (2012, 107-110) for general discussion of functionalist accounts of art and their problems.

[18] These two examples are from Thomasson (2014, 47-48).

[19] Note that I'm not claiming it's an artifact because it's made out of cardboard. This would be a case where an artifact is made out of another artifact, which happens all the time, e.g. a car is made out of an engine, tires, chassis, etc.

A further class of examples are artifacts which are the result of *play*, such as a tower constructed out of blocks or a spaceship that a child makes from Lego or a pyramid of stuffed animals.[20] Sand castles, too, often fall into this category. That is, children are merely creatively 'messing around' and while the concerted actions are directed, the result may not be for any particular purpose, but is just a kind of play or leisure (or the result thereof). The results are clearly artifacts. The child intentionally constructs a pyramid of stuffed animals or a Lego spaceship or whatever. Even if we can't identify a function or if we ask the child what the thing is for and they somewhat disdainfully say it isn't 'for' anything, the resulting object is still intuitively an artifact, just like Hilpinen's cardboard cut-out. These cases are likewise counterexamples to (1) since we have clear cases of something being an artifact without having an intended function.[21]

One way to resist the counterexamples to (1) is to maintain that in all of the above cases the maker's *reason for making* the artifact is the artifact's *function*. This view seems to be adopted by Randall Dipert (1993), at least with respect to putatively non-functional artworks:

> If we describe human purposes broadly enough, and if art really does not serve *some* function, play some role in contributing toward our conception of a fruitful life, it is unimaginable why we would voluntarily engage in it. Assuming human rationality, art surely serves some human needs, for both artist and appreciator, and so is but a "means" to *some* end. We are perhaps less conscious of precisely what this goal is in our experience of art than in our experience of other artifacts, especially practical ones (1993, 111).

Dipert defends function essentialism and seems to be suggesting that if we don't attribute some function, however broad, to artworks, then it's rendered totally unclear why humans would ever produce art. That is, humans are rational beings that act (and thus produce things) *for a reason*, so the deliberate production of art must be undertaken for *some* reason. Dipert seems to be suggesting that whatever the reason a maker had for making any given artwork can be identified as the general function of that artwork.[22] For example, if a desperately poor artist makes a work of art just so she has something to sell, then the function of the artwork is to produce an income for the artist.

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[20] This last example is from Korman and Carmichael (2017, 194). Bloom (1996, 18-19) also considers many toys to be non-functional.

[21] In case it's objected that such objects aren't significantly different from art, we can note that the art world doesn't treat them as art. A pyramid of stuffed animals made by a four-year old isn't going to be lauded for its artistic merits. Indeed, it's frequently thought that to make art requires an intention to make art, and I'm skeptical that very young children even have a partial grasp of what art is. See Mag Uidhir (2013) and Lopes (2013) for discussion of this constraint. Moreover, Hilpinen's triangular cardboard cut-out, done for no other reason than to make such a thing, is definitively not art.

[22] Note that Dipert talks of artifact and artwork purposes, rather than functions, but this is a mere terminological difference.

This view can be extended beyond the artwork case to artifacts generally. The functions of artifacts are the reason the maker had for making them. In the case of doodles and paperclip sculptures, they are for distraction during a boring faculty meeting. In the case of play, the pyramid of stuffed animals, the sandcastle, and the spaceship made of Lego bricks all have as their general function, being for leisure or entertainment. That is, they're for whatever reason their makers had for making them. Thus, we can attribute a general function to all artifacts, thereby vindicating (1).

Is this a plausible way of handling the counterexamples in defense of (1)? I don't think so, for two related reasons. First, this view of artifact functions conflates two importantly distinct phenomena: the reason the maker had for making something and the function that the product of their making has. Consider the following scenario: I get into a fight with my boyfriend and after the dispute I need to calm down, which I do by engaging in carpentry in the garage. After the fight, I go to the garage and build a chair. According to Dipert's account, it seems we have to say that the function of the resulting chair is, at least, to help me calm down. But intuitively, the chair's function isn't for helping me calm down – that was just the reason I had in making it. Rather, the chair is for sitting. Sometimes I may make a chair expressly for sitting because I need a new chair for my study. But the function of such a chair isn't *being a chair for my study*, that's just *why* I made it. The chair's function is still for sitting. If we go Dipert's route, we end up over-attributing functions (reasons for making *and* intended functions) and we collapse the distinction between *a reason to make X* and *X's function F*.

Perhaps Dipert can assuage this worry by appealing to Millikan's distinction between direct and derived functions. Consider Beth Preston's (2009, 224) example of a bread baker: the direct proper function of bread is nourishment, this is what it's for because past instances of bread have successfully performed that function and thus bread is *re*produced because of previous loaves' success at providing nourishment. However, a baker may also bake bread for the purpose of making an income and the bread can function as a source of income because it has its direct proper function of providing nourishment. Thus, providing a source of income is the derived proper function of these loaves of bread, a function that derives from the baker's intentions and the success of previous loaves to provide nourishment (bread probably wouldn't be a source of income if it couldn't provide nourishment).[23]

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[23] I say 'probably' because we do sometimes reproduce artifacts merely because we *believe* they successfully perform their function even when they don't. For example, Preston points to the beaked plague masks of the seventeenth century, which were produced to protect doctors from the bubonic plague under the mistaken belief that disease was spread according to the miasma theory of disease. This wasn't how the disease spread and so such masks were completely useless at protecting the wearer from the plague. Nonetheless, they were reproduced well into the nineteenth century. Preston (2009, 217-218) calls these cases of 'phantom functions'. See also Parsons (2019).

Analogously, Dipert could say that my making of the chair to calm down is a derived proper function which derives from my intention to calm down and the direct proper function of the chair, which is for sitting. But here we have a disanalogy: the proper function of chairs is not to calm people down and they aren't *reproduced* because of the success of previous chairs at enabling people to calm down. Helping me calm down seems like a reason not a function.[24]

With respect to the bread baker, we can distinguish cases that involve direct and derived functions and distinct reasons for baking. For example, consider Preston's example again, except imagine that the baker needs to decide between baking sourdough loaves or baking rye loaves. The baker settles on rye, even though sourdough sells better, because rye was his dead wife's favourite kind of bread. The bread still has the direct proper function of providing nourishment and the derived proper function of providing an income, but also the reason why the baker made *this* bread is that it was his dead wife's favourite. Rye being his dead wife's favourite bread is the reason he baked it, not the bread's function, either direct or derived. Again, it seems clear that we should keep these phenomena distinct.

Second and relatedly, Dipert's view attributes the wrong function to the wrong entity. In both the case of the chair made after the fight with my boyfriend and the results of play such as a pyramid of stuffed animals or the spaceship made from Lego bricks, Dipert's view says that it's the function of the *chair* and the *pyramid* and the *spaceship* that they be for calming me down and entertainment, respectively. But it's the *making of* the chair not the chair itself that aids in calming me down after a fight. That is, the activity of production, not the product is what I have reason to do to calm down. Dipert's view would erroneously ascribe that 'function' to the product rather than the production. It would be weird if later you see that I need to calm down so you hand me the chair I made. Similarly, children construct a spaceship out of Lego or a pyramid out of stuffed animals in order to play. They engage in the construction of such artifacts because they are playing – this is an immediate reason to engage in such an activity. But it is the activity itself that is the entertainment not the resulting object (although they can, of course, play with the spaceship after having built it). They are entertaining themselves *by* building such things. Thus, it is the activity of building which they have a reason to do, not the result, but again, Dipert's view would erroneously ascribe the entertainment function to the resulting artifact. Rather, the artifact isn't for anything, but building the artifact was done for a reason – play.

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[24] At least in this instance. A stress ball has the intended function of calming someone down.

Dipert's view secures (1), but at what cost? Describing functions so broadly in terms of general human purposes is implausible. Moreover, note that Dipert's 'reason for making' approach isn't plausible for someone who endorses (2), the kind membership condition, since the reason for making an artifact had by each maker won't result in a kind-specifying function. Thus, going Dipert's route would preclude (2).[25]

However, there's a nearby response that could save (1). Almost everyone accepts the intention-dependence condition on artifacts; to be an artifact is to be intentionally created by a person. We also noted at the outset that makers can't just intend to make something of a given kind, they also need to do something by intentionally (and successfully) bestowing various features on their creation. When I intend to make a chair, I intend it to be made of wood, to be for sitting, to be used in the dining room (as opposed to my workbench in the garage), to have such and such aesthetic features, and so on. I'm successful to the degree that my creation matches the features I intended to bestow upon it. One could say that, if a person intentionally creates something, then that thing automatically has the function of satisfying the maker's intention. As a result, every artifact has a function, even Hilpinen's triangular cardboard cut-out, which satisfies its maker's intention to make a triangular cardboard cut-out, thereby securing (1).

What's wrong with this 'deflationary' approach to function essentialism? First, note that, like Dipert's reason for making approach, it isn't compatible with condition (2), since it wouldn't yield a kind-specifying function. More importantly, it doesn't seem like the concept of *function* is doing any real explanatory work in such an account of artifact essences. If we want to know what the essential natures of artifacts is, it's not particularly illuminating to be told that to be an artifact is automatically to have the function of satisfying its maker's intention. Any substantive explanation of what this amounts to appeals to the features the maker intended to bestow on their creation – the function 'satisfying the maker's intention' doesn't add anything beyond the appeal to the maker intending and to bestow certain features and having successfully done so. In fact, if I intend to make a chair and one of the features I intend to bestow is that it be for sitting someone, then it has (at least) *two* functions: being for sitting and satisfying its maker's intention. Only the first one is what we intuitively recognize chairs as being *for*. Here we can see that it's the *intended features* (which may or may not include an *intended function*) that yields a robust account of the nature of artifacts: artifacts are the successful result to make something that matches the features I intended to bestow. Hilpinen's triangular cardboard

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[25] Note that functionalist accounts of artworks are compatible with (2) since they offer an art-specifying function.

cut-out doesn't have an intended function, but it does have various intended features such as being triangular and being made of cardboard.[26] Talk of artifacts being functional objects because they all satisfy their maker's intention is explanatorily idle.

Additionally, since almost all those who accept function essentialism adopt some version of Millikan's account of proper functions, the function of 'satisfying the maker's intention' isn't *why* chairs get *reproduced*, it's because they successfully seat someone. Of course, one could object that successfully seating someone *is* satisfying the maker's intention, but again, it's the features the maker intended to bestow that are doing explanatory work, not the satisfaction of the maker's intention by those features. Such a deflationary explanation looks especially odd when we deploy it in cases of action. For example, if someone asks me why I raised my hand in the council meeting, then I give at most a glib response when I say that I was intending to satisfy my intention to raise my hand. Rather, the action's function was to notify others that I had a comment or question, so it's at best trivial that in doing so I satisfied my intention to do so. We should therefore reject this deflationary approach to function essentialism and concomitantly maintain our rejection of (1).

4. Problems with the Kind Membership Condition

So much for (1). The second component condition of function essentialism is the kind membership condition, which was formulated as follows:

> (2) *Kind Membership Condition:* Necessarily, for all artifact kinds K, there is some function F which all and only members of K have.

It may seem redundant at this point to consider (2) since a rejection of (1) entails a rejection of (2).[27] Despite this, I think it's instructive and interesting to consider why (2) fails on independent grounds, especially because the responses considered to save (1) do nothing to secure (2).

(2) offers both a necessary and sufficient condition for artifact kind membership and is therefore intended to offer a kind-specifying condition. That is, (2) claims both that there's a function that all members of a given artifact kind have *and* that no other artifacts have that function which aren't also members of the given kind. As a sufficient condition on kind membership, (2) seems

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[26] Hilpinen (1992) himself adopts an intentionalist account of artifacts where they need to satisfy (to some degree) their maker's associated type-description, but he doesn't take this to be a *function* of the resulting artifact. See also Bloom (1996) and Thomasson (2007) for such intentionalist approaches. I say more about such views in section 6.

[27] If some artworks and toys don't have functions then *ipso facto* not all members of the artifact kinds they belong to have a unique, shared function.

susceptible to easy counterexamples. It says that each artifact kind has a *unique* function which determines membership in the kind. Hence, no two artifact kinds can share a function. But many cases come to mind. Intuitively, a chair is a piece of furniture for sitting on. However, lots of things are for sitting on: stools, sofas, benches, ottomans, and so on. Maybe chairs are pieces of furniture for seating a *single* individual. Sofas, benches and ottomans are for seating multiple people so this differentiates them from chairs, but stools are also for seating a single person. At least some artifact kinds seem to share a function. Similarly, a corkscrew is for removing a cork from a bottle, yet there are two-pronged cork pullers that aren't cork*screws*. Examples are easily multiplied: bicycles, tricycles, and unicycles all have the same function, as do clocks and watches.

One can avoid this result by individuating the associated functions more narrowly. Maybe a chair is for seating a single person *with back support*. This won't work though, because some chairs don't have backs (e.g. curule seats) while some stools do have backs (e.g. barstools). Artifact kinds need to be individuated far more finely than *chair* to avoid this problem. However, this requires individuating function so narrowly that our everyday artifact kinds are rejected in favour of highly esoteric kinds. Proposals by Crawford Elder (2007, 2014), Marzia Soavi (2009), and Maarten Franssen and Peter Kroes (2014) tie an artifact's function to its historical origin/history of production and its structure, which yields a unique function for that kind. Artifact kinds aren't things like *chair*, *car*, or *watch* but rather are things like the *Eames 1957 desk chair* (Elder's example), the *1969 Plymouth Valiant 100* (Millikan's example), or the *Pasha Seatimer grand modèle automatique Cartier watch* (Franssen and Kroes' example). As Franssen and Kroes say, "the artefact kind 'Pasha Seatimer grand modèle automatique Cartier watch' then consists of those things that have all the structural characteristics of a Pasha Seatimer grand modèle automatique Cartier watch and that additionally have been designed and made to have this structure. To such things, their history – their having been designed and made for some specific use – is by definition essential" (2014, 78). These artifact kinds have a unique function shared by all and only their members because the function must be performed in a particular way (i.e. by the artifact having a particular structure and perhaps material constitution) which the artifact has in virtue of having a particular history of production. Likewise, Elder (2014, 37) argues that this entails that *corkscrew* isn't an artifact kind, but that different kinds of corkscrew, such as the winged, electronic, and pull-up varieties, are.[28]

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[28] While Baker adopts the sufficiency of this condition, she doesn't seem to appreciate the obvious counterexamples to it. Indeed, her examples are of coarse-grained artifact kinds like *boat* (2007, 52).

This avenue seems to secure (2) as a sufficient condition on artifact kind membership but only by rejecting our familiar, everyday artifactual kinds like *chair* or *pencil* or *shoe* in favour of highly specific, historically-tethered artifact kinds. Such revisionism is unintuitive and seems like an *ad hoc* move to save function essentialism, which is typically cast as a thesis about our quotidian artifact kinds. Indeed, that's why function essentialism is at least initially appealing; it appears plausible for our everyday artifact kinds like *chair* and *watch*. So while the kinds of proposals offered by Elder and friends seems to secure (2) as a sufficient condition on kind membership, I think it's too radically revisionary to be a plausible view of artifact essences. In saving the sufficiency of (2), we give up the initial motivation for the thesis.

Instead, one could weaken (2) so that it offers a *necessary* but not a *sufficient* condition on artifact kinds, namely, all members of the kind need to share a function, but other artifact kinds may also be (partly) individuated by the same or similar function. We can reformulate the condition as follows:

> (2a) *Kind Membership Condition:* Necessarily, for all artifact kinds K, there is some function F which all members of K have.

This weakens (2) to avoid the easy counterexamples to the sufficiency condition. However, while (2a) is patently more plausible than (2), it is equally susceptible to counterexamples. There are cases akin to the artist examples above that show that all members of a kind need not share a function. For example, Paul Bloom (1996, 5-6) argues that there's nothing incoherent about someone intending to make a boat but expressly not intending that the boat ever end up in water. Nonetheless, if it had other structural and material features typical of boats, we would intuitively classify it as a boat, even knowing that the maker didn't intend it to function in the way most boats do. Similarly, makers may make an artifact, such as a chair, and intend it to be only 'for show' and not ever for being sat upon. This applies to many *model* artifacts, which are often intended to illustrate aesthetic or structural features of the kind but not the function and indeed sometimes the models are unable to perform the function associated with the kind. Even if such an object had the requisite causal powers to support a single seated person, the maker's intention that it not be for sitting on seems to overrule any attribution of function of this sort.[29] Makers appear to have the ability, in principle, to explicitly intend to make

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[29] There is quite a bit of psychological research purporting to show that children classify artifacts by makers' intentions rather than function, but the evidenced is mixed. See Bloom (1996, 1998), Gelman (2013), Roversi, Borghi, and Tummolini (2013), and Taborda and Cheries (2017) for representative discussion.

an artifact of a given kind without intending that that artifact have the function normally associated with that kind. Thus, (2a) is false: not all members of a given artifact kind K need share a function.

One could try to resist Bloom's showroom counterexamples to (2a). In response to Bloom, Simon Evnine (2016, 124fn5) argues that *not intending to X* isn't sufficient for *having the function not-to-X*, both because functions need to come from intentions rather than a lack of intentions and because he doesn't think *not-Xing* can be plausibly attributed as a function.

Rather, Evnine (2016, 199ff.) distinguishes between kind-associated and idiosyncratic functions. According to Evnine, the kind-associated function of a chocolate bar is to be eaten but *this* particular chocolate bar I made which has a loved one's name imprinted on it, is for reminding me of that loved one. The latter is an idiosyncratic function of the chocolate bar that comes from my intentions in making it (2016, 119). In the case of prototypes, Evnine takes them to only have idiosyncratic functions that they acquire from their maker's intentions. For example, the first corkscrew, developed in conjunction with the development of corks, had the idiosyncratic function of removing corks from bottles but had no kind-associated function. Once corkscrews (and corks) entered into general production a history of production becomes established and the kind then acquires a kind-associated function.[30]

Evnine argues that for an artifact to have some function F associated with artifact kind K, a maker needs to intend to make a K, *not* intend to make something that F's. According to Evnine, this is because F is *necessarily* associated with *being a K*, so not only are functions *kind-associated* but *kind-dependent*, i.e. which function an artifact has is dependent on which artifact kind it belongs to (2016, 122). Thus, Evnine thinks that Bloom is wrong that a showboat or show-room chair doesn't have the function of transporting goods or people over water and seating a single person, respectively. Rather, in virtue of being boats and chairs, they have their respective kind-associated functions.

What about their idiosyncratic functions? As I mentioned, Evnine thinks that an artifact can't have a function of *not-Xing* since one cannot bestow a function merely with a lack of an intention that it have that function. Instead, Evnine (2016, 123-124) recognizes that kind-associated and idiosyncratic functions can conflict. In Bloom's showroom cases, the artifacts have the kind-associated function in virtue of being a member of that kind, but also have an idiosyncratic function bestowed by their maker. These two functions happen to be incompatible, e.g. 'being for transporting goods and people over water' and either 'not being for transporting goods of people over water' (according to Bloom) or

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[30] Evnine's distinction between kind-associated and idiosyncratic functions is structurally parallel to Millikan's distinction between direct and derived proper functions.

'being for show' (according to Evnine). The idiosyncratic function in this case suppresses the kind-associated function. Bloom's showboat thereby has both the kind-associated and idiosyncratic function, so isn't a counterexample to sharing a function as a necessary condition on artifact kind membership.

What are we to think of Evnine's response to this class of counterexamples? At least as an empirical claim about makers' intentions, it seems that it's in principle possible for makers to intend to make something with the function F, *rather* than intending to make a K and thereby make something with the function F. But this doesn't really address Evnine's claim that Bloom's show-room examples have both a kind-associated and idiosyncratic function which conflict. I'm inclined to simply deny that a showboat has the function of transporting goods and people over bodies of water, partly because the maker would justifiably offer a rebuke to someone who used it in this way: "That's not what my boat is *for*!" Such a rebuke carries normative force it seems, in part, because the maker's intentions are authoritative with respect to the functions of their creations. Someone would be *using it wrong* if they were to try to use the showboat in water in the same way that someone is incorrectly using a pen if they use it to stir their coffee. Things get complicated quickly here, because the normative force of the maker's intention may be mitigated by ownership, i.e. if someone other than the maker comes to own the boat the rebuke is less forceful.[31] But that such a rebuke carries normative force gives us a *prima facie* reason to view the boat as not having the function of transporting goods and people over bodies of water.

Another concern with Evnine's view is that it cannot account for artworks. Artworks seem to be, at least in most cases, a kind of artifact, but we've seen many cases that suggest that there is no single function shared by all artworks. They can be for things as diverse as income, representation, emotional expression, political propaganda, cultural revolution, moral education, displaying beauty, being appreciated in a certain way, or they can be for nothing at all. There's no readily identifiable kind-associated function that would be shared by all members. Many artworks would only seem to have idiosyncratic functions or no functions whatsoever. So Evnine's response to Bloom doesn't work for at least one very important sub-kind of artifact.

In a sense, considering Evnine's view and response to Bloom is otiose because, while Evnine hopes that some version of function essentialism works, he's ultimately skeptical that any general

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[31] Similarly, you'd be justifiably irritated if I ask to borrow your pen and then use it to stir my coffee, but if it's *my* pen it seems I can justifiably decide how I choose to use it. See Franssen (2006) for general discussion of the normativity of artifacts.

thesis like (1) is plausible (2016, 129). In particular, he thinks it may be hopeless to identify functions for many artworks, so (1) is false. But if (1) is false, then the necessary condition in (2), which we reformulated as (2a), is also false because if some artifacts don't have a function, then not all members of an artifact kind will share a function (note that the claim is not that all art lacks a function, only that some does). However, Evnine (2016, 129) does suggest that functionless artworks may be derivative of, and ultimately dependent upon, the presence of functional artifacts in a culture. That is, a culture can't have artworks without having functional artifacts first, and thus there is a way in which we could capture something important about the relation between artworks and other artifacts, namely that the former are privative versions of the latter. Evnine's claim about cultures could either be a metaphysical or an empirical claim. At least as the latter, though, it's hard to imagine a culture that *only* had artworks but no artifacts, but of course conceivability is no guide to anthropology. This would also be a much weaker version of (1) and seems to have abandoned the spirit of function essentialism. Nonetheless, Evnine's skepticism suggests an alternative response to saving some version of (1): restrict function essentialism to a certain large subset of artifacts which excludes artworks as *sui generis* artifacts.[32] I consider this view in what follows.

5. Appeal to Technical Artifacts

The defender of function essentialism who, like Evnine, is skeptical that functions can be found for all artworks, can restrict the view to so-called *technical artifacts*, thereby securing function essentialism for the vast majority of artifacts. The notion of technical artifacts is often appealed to in the literature, but isn't usually defined.[33]

One rough characterization is given by Lynne Baker, who restricts her account of artifacts to technical artifacts, defining them thus:

> Although the category of artifact includes sculptures, paintings, literary works, and performances, I shall put aside these fascinating artifacts and focus only on artifacts that have practical functions.
> My concern here is with an important subclass of artifacts – technical artifacts, the material products of our endeavors to attain practical goals. Such artifacts are objects intentionally made *to serve a given purpose*. (2007, 49)

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[32] The view that artworks are *sui generis* artifacts is defended by Levinson (2007).
[33] Those who appeal to technical artifacts include Vermaas and Houkes (2003), Houkes and Vermaas (2004), Hansson (2006), Scheele (2006), Kroes and Meijers (2006), Baker (2007), Vermaas (2009), Krohs (2009), and Kroes (2009). Baker is the only one to give any clue as to what the distinction amounts to. However, with the exception of Baker, the interest in technical artifacts is less about explaining the nature of artifacts and more with explaining the nature of artifact functions.

Baker seems to take the technical/non-technical distinction to be between artworks, which she takes to be functionless, and all other artifacts, which she assumes serve some practical purpose. But marking the distinction in this way isn't helpful. First, it assumes that all artworks lack functions. Second, it assumes that all non-artwork artifacts have functions. Third, as a basis for defending function essentialism, it is patently question-begging. We've already seen that many artworks are explicitly intended to have functions. We've also seen that some non-art artifacts, such as sandcastles, lack a function. Baker is simply restricting her account of artifacts to those artifacts that have a function. But this doesn't tell us how to distinguish the functional from the functionless artifacts, it just assumes that there is such a distinction. It certainly can't be made, as Baker and Evnine would have it, by appealing to artworks.

Alternatively, perhaps one could draw the technical/non-technical distinction using technological sophistication, which may be the motivation behind the 'technical' moniker. Technical artifacts are objects like airplanes, nuclear attack submarines, the Large Hadron Collider, cellphones, laptops, GPS satellites, and the like. Non-technical artifacts are things like a driftwood sculpture or a doodle or sand castle, which aren't technically sophisticated, i.e. they don't involve or were produced by means of, technologically complex artifacts or processes. The obvious problem with this approach is that technological sophistication is a matter of degree. Hammers, cups, and chairs have functions but aren't particularly complex artifacts. Indeed, hammers are some of the earliest tools to be used by our ancestors. Similarly, one could make an incredibly technologically complex artwork which has no function (maybe akin to a Rube Goldberg machine or computer art).[34] There's no obvious non-arbitrary cut-off on the scale of technological sophistication, so this approach doesn't yield a principled distinction between technical and non-technical artifacts.

An alternative way to precisify the distinction is to restrict technical artifacts to those artifacts that are the proper study of, or result from the application of, engineering and engineering practice.[35] This isn't particularly promising since virtually every artifact is the result of applying engineering knowledge; some artworks involve the application of engineering knowledge so would count as 'technical' artifacts in this sense. Nonetheless, they could in principle lack a function, as many technologically complicated artworks do. Appealing to engineering practice is thus of no help.

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[34] See Lopes (2009) for discussion of computer art.
[35] Houkes and Vermaas (2004) and Hansson (2006) seem to hold this view. In a similar vein, Lowe (2014) argues that the 'real' artifact kinds that have essences are only those that are subject to laws of engineering.

Finally, the defender of function essentialism could opt to follow Baker and just insist that technical artifacts are those that have functions (be they artworks or non-art artifacts) and claim that function essentialism holds for them. One could do this, but it doesn't seem to establish the *essentialist* thesis. It's just a way of saying that those artifacts that have functions, have functions. It's not at all obvious that they have their functions *essentially*. Some argument would be needed for the essentialist claim and short of this, we shouldn't endorse such a thesis.[36] But it's not at all clear that such a view can be properly called function essentialism about *artifacts* if it acknowledges that many artifacts don't have functions. While our practices clearly give pride of place to artifact functions, this doesn't seem to be an essential feature of being an artifact or being a member of a given artifact kind.

6. Conclusion

Function essentialism is a widespread thesis about the nature of artifacts and artifact kinds. Initially, it seems that many of our everyday artifacts are made for some purpose and that we categorize artifact kinds based on possession of a shared function. I gave explicit formulations of both conditions of function essentialism and offered counterexamples to both. While there are ways to handle both sets of counterexamples, as offered by Dipert, Elder, Evnine, and Baker, I argued that we have strong reason to reject these various proposals.

Nonetheless, we can and should still recognize that the vast majority of artifacts have functions and that artifact kinds are often grouped by a rough, shared function. The challenge is to give an account of artifacts that can accommodate this feature of our classificatory practices. While I can't give such an account here, we can note some promising approaches. In considering a response to (1) that takes the function of an artifact to be its satisfaction of its maker's intention, we have the genesis of an idea of what artifacts are: they are the *successful* products of a maker's intention to make something of that kind. I've been at pains to argue that makers need not intend to bestow either a particular function or any function at all on their creations, yet they often intend to do so. However, they also often intend to bestow many other features, too, such as a particular shape or structure, a particular material constitution, or certain aesthetic features. Function is central for many artifact kinds, but in some cases other features take precedence. For example, to be an A-frame cottage is to have a certain function as a home, but the most central feature is to have a certain structure (deeply sloped roof that

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[36] Claims about essence typically involve intuitions one has about identity and kind-membership in counterfactual cases. It's not at all obvious that something that is, say, a chair essentially has the function of being for seating a single person. I have the intuition that this very same object or kind of object could have been for something else (such as being purely a marker of social status) yet still be a chair.

starts very close to the foundation). Likewise, to be Peking duck is to be made of duck and prepared in a particular manner.[37] Thus, artifacts are the successful products of their maker's intention to make something of that kind, where this involves the maker intending to bestow various features relevant to the kind. It's the *intended features* of artifacts which are important, which may or may not include an *intended function*. This gives pride of place to makers' intentions and the match between what they intend to make and what features the resulting object actually has. Such intention-based accounts aren't new, being defended by, for example, Hilpinen (1992), Bloom (1996), and Thomasson (2003, 2007, 2014). Intention-based approaches take function to be *central* but not *essential* to artifactuality. Given the problems with function essentialism, makers' intentions are where we should be looking for an account of artifacts.

References

Baker, Lynne Rudder. *The Metaphysics of Everyday Life*. Cambridge: Cambridge University Press, 2007.

—. "The Metaphysics of Malfunction" *Techné* vol. 13 no. 2 (2009): 82-92.

Baxandall, Michael. *Paintings and Experience in 15th Century Italy*. Oxford: Clarendon Press, 1972.

Bloom, Paul. "Intention, History, and Artifact Concepts" *Cognition* vol. 60 (1996): 1-29.

—. "Theories of Artifact Categorization" *Cognition* vol. 66 (1998): 87-93.

Davies, Stephen. *Definitions of Art*. Ithaca: Cornell University Press, 1991.

Dipert, Randall R. *Artifacts, Art Works, and Agency*. Philadelphia: Temple University Press, 1993.

Dodd, Julian. "What *4'33"* Is" *Australasian Journal of Philosophy* vol. 96 no. 4 (2018): 629-641.

Eaton, A. W. "Artifacts and Their Functions." In *The Oxford Handbook of History and Material Culture*, edited by Ivan Gaskell and Sarah Anne Carter, 1-21. Oxford: OUP, 2020.

Elder, Crawford L. "Artifacts and Mind-Independence." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 27-43. New York: Springer, 2014.

—. "On the Place of Artifacts in Ontology." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 33-51. Oxford: Oxford University Press, 2007.

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[37] These examples are Thomasson's (2014, 49).

Evnine, Simon. *Making Objects and Events*. Oxford: OUP, 2016.

—. "Ready-Mades: Ontology and Aesthetics" *British Journal of Aesthetics* vol. 53 no. 4 (October, 2013): 407-423.

Fine, Kit. "Essence and Modality" *Philosophical Perspectives* vol. 8 (1994): 1-16.

Franssen, Maarten. "The Normativity of Artefacts" *Studies in the History and Philosophy of Science* vol. 37 (2006): 42-57.

Franssen, Maarten and Peter Kroes. "Artefact Kinds, Ontological Criteria and Forms of Mind-Dependence." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 63-83. New York: Springer, 2014.

Gelman, Susan A. "Artifacts and Essentialism" *Review of Philosophy and Psychology* vol. 4 no 3 (2013): 449-463.

Grafton-Cardwell, Patrick. "The Aesthetic Engagement Theory of Art" *Ergo, forthcoming.*

Grandy, Richard. "Artifacts: Parts and Principles." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 18-32. Oxford: Oxford University Press, 2007.

Gracyk, Theodore. *The Philosophy of Art: An Introduction*. Malden, MA: Polity Press, 2012.

Griffith, Paul. *Modern Music: The Avant Garde Since 1945*. New York: George Braziller, 1981.

Hansson, Sven Ove. "Defining Technical Function" *Studies in the History and Philosophy of Science* vol. 37 (2006): 19-22.

Hilpinen, Risto. "On Artifacts and Works of Art" *Theoria* vol. 58 (1992): 58-82.

Houkes, Wybo and Pieter Vermaas. "Actions versus Functions: A Plea for an Alternative Metaphysics of Artifacts" *The Monist* vol. 87 no. 1 (2004): 52-71.

—. "Produced to Use" *Techné* vol. 13 no. 2 (2009): 123-136.

—. "On What Is Made: Instruments, Products, and Natural Kinds of Artefacts." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 167-190. New York: Springer, 2014.

Hughes, Jesse. "An Artifact is to Use: An Introduction to Instrumental Functions" *Synthese* vol. 168 (2009): 179-199.

Iseminger, Gary. *The Aesthetic Function of Art*. Ithaca: Cornell University Press, 2004.

Kelemen, Deborah and Susan Carey. "The Essence of Artifacts: Developing the Design Stance." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 212-230. Oxford: Oxford University Press, 2007.

Korman, Dan and Chad Carmichael. "What Do the Folk Think about Composition and Does It Matter?" In *Experimental Metaphysics*, ed. David Rose, 187-206. London: Bloomsbury Academic Press, 2017.

Kornblith, Hilary. "How to Refer to Artifacts." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 138-149. Oxford: Oxford University Press, 2007.

—. "Referring to Artifacts" *Philosophical Review* vol. 89 no. 1 (January, 1980): 109-114.

Koslicki, Kathrin. *Form, Matter, Substance*. Oxford: OUP, 2018.

Kroes, Peter. "Technical Artifacts, Engineering Practice, and Emergence." In *Functions in Biological and Artificial Worlds*, eds. Krohs and Kroes, 277-292. Cambridge: MIT Press, 2009.

Kroes, Peter and Anthonie Meijers. "The Dual Nature of Technical Artefacts" *Studies in the History and Philosophy of Science* vol. 37 (2006): 1-4.

Krohs, Ulrich. "The Cost of Modularity." In *Functions in Biological and Artificial Worlds*, eds. Krohs and Kroes, 259-276. Cambridge: MIT Press, 2009.

Krohs, Ulrich and Peter Kroes, eds. *Functions in Biological and Artificial Worlds*. Cambridge, MA: MIT Press, 2009.

Levinson, Jerrold. "Artworks as Artifacts." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 74-82. Oxford: Oxford University Press, 2007.

Lopes, Dominic McIver. *A Philosophy of Computer Art*. London: Routledge, 2009.

Lowe, E. J. "How Real are Artefacts and Artefact Kinds?" In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 17-26. New York: Springer, 2014.

Mag Uidhir, Christy. *Art and Art-Attempts*. Oxford: OUP, 2013.

Margolis, Joseph. *Art and Philosophy*. New Jersey: Humanities Press, 1980.

Millikan, Ruth Garrett. "In Defense of Proper Functions." In *White Queen Psychology and Other Essays for Alice*, 13-29. Cambridge, Massachusetts: MIT Press, 1995.

—. *Language, Thought and Other Biological Categories*. Cambridge, MA: MIT Press, 1984.

—. "Wings, Spoons, Pills, and Quills: A Pluralist Theory of Function" *The Journal of Philosophy* vol. 96 no. 4 (1999): 191-206.

Moore, Steven Dean, Director. *The Simpsons*, "Mom and Pop Art", Season 10, Episode 19. United States: Fox Broadcasting, 1999.

Olivero, Irene. "Function Is Not Enough" *Grazer Philosophische Studien* vol. 96 no (2019): 105-129.

Parsons, Glen. "Phantom Functions and the Evolutionary Theory of Artefact Proper Function" *Grazer Philosophische Studien* vol. 96 (2019): 154-170.

Preston, Beth. *A Philosophy of Material Culture: Action, Function, and Mind*. New York: Routledge, 2013.

—. "Philosophical Theories of Artifact Function." In *Philosophy of Technology and Engineering Sciences*, ed. Anthonie Meijers, 213-233. Amsterdam: Elsevier, 2009.

Roversi, Corrado, Anna M. Borghi and Luca Tummolini. "A Marriage is an Artefact and Not a Walk That We Take Together: An Experimental Study on the Categorization of Artefacts" *Review of Philosophy and Psychology* vol. 4 no. 3 (2013): 527-542.

Searle, John R. *The Construction of Social Reality*. New York: The Free Press, 1995.

Scheele, Marcel. "Function and Use of Technical Artefacts: Social Conditions of Function Ascription" *Studies in History and Philosophy of Science* vol. 37 (2006); 23-37.

—. "Social Norms in Artefact Use" *Techné* vol. 10 no. 1 (2006): 53-65.

Soavi, Marzia. "Realism and Artifact Kinds." In *Functions in Biological and Artificial Worlds*, eds. Krohs and Kroes, 185-202. Cambridge: MIT Press, 2009.

Stecker, Robert. *Artworks: Definition, Meaning, Value*. University Park, PA: Pennsylvania State University Press, 1997.

—. "The Interactions of Function and Aesthetic Value in Artifacts" *Grazer Philosophische Studien* vol. 96 (2019): 19-36.

Taborda, Hernando and Erik W. Cheries. "Developmental Origins of Biological Explanations: The Case of Infant's Internal Property Bias" *Psychonomic Bulletin and Review* vol. 24 (2017): 1527-1537.

Thomasson, Amie. "Artifacts and Human Concepts." In *Creations of the Mind*, ed. Eric Margolis and Stephen Laurence, 52-73. Oxford: Oxford University Press, 2007.

—. "Public Artifacts, Intentions, and Norms." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 45-62. New York: Springer, 2014.

—. "Realism and Human Kinds" *Philosophy and Phenomenological Research* vol. 67 no. 3 (November, 2003): 580-609.

Trachtman, Paul. "A Brief History of Dada" *Smithsonian Magazine* May 2006, https://www.smithsonianmag.com/arts-culture/dada-115169154/. Accessed 25 September 2020.

Vega-Encabo, Jésus and Diego Lawler. "Creating Artifactual Kinds." In *Artefact Kinds: Ontology and the Human-Made World*, ed. Maarten Franssen et al., 105-124. New York: Springer, 2014.

Vermaas, Pieter E. "On Unification: Taking Technical Functions as Objective (and Biological Functions as Subjective)." In *Functions in Biological and Artificial Worlds*, eds. Krohs and Kroes, 69-87. Cambridge: MIT Press, 2009.

Vermaas, Pieter E. and Wybo Houkes. "Ascribing Functions to Technical Artifacts: A Challenge to Etiological Accounts of Functions" *British Journal for the Philosophy of Science* vol. 54 (2003): 261-289.

—. "Technical Functions: A Drawbridge Between the Intentional and Structural Natures of Technical Artefacts" *Studies in the History and Philosophy of Science* vol. 37 (2006): 5-18.

Wilcox, John. "The Beginnings of L'Art Pour L'Art" *Journal of Aesthetics and Art Criticism* vol. 11 no. 4 (June, 1953): 360-377.

Wright, Larry. "Functions" *Philosophical Review* vol. 82 (1973): 139-168.