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Artifacts and the Limits of Agentive Authority

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Author-Intention-Based Accounts of Artifacts and Prototype Production

Proponents of author-intention-based accounts of artifacts hold that an artifact *is* what its original author(s) *intended* it to be. (“Author” is here used broadly to include the artifact’s original designer, inventor, maker, builder, producer, etc., i.e., those agents who are in some sense responsible for the creation of an artifact or artifact-kind.) According to this approach, an artifact’s kind-membership and its essential features are determined, either directly or indirectly, by the content of the intentions guiding the artifact’s original author in their creative act of producing the artifact in question (Baker (2004), (2007); Dipert (1993); Evnine (2016); Hilpinen (1993), (2011); Thomasson (2003), (2007), (2009), (2014)). According to Amie Thomasson, for example, an artifact of kind K is essentially a product of a largely successful intention to create something

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of kind K (Thomasson (2003: 592-602)). A maker has the relevant intention (viz., a largely successful intention to create something of kind K) if and only if she has a substantive concept of the nature of Ks which largely matches that of prior makers of Ks (if any), and she intends to realize that concept by imposing K-relevant features. The K-relevant features in question can be functional, structural, historical, aesthetic, or of various other sorts or combinations.

The characterization just given does not apply to the case of prototype production, since in this case there are, as of yet, no prior exemplars of the artifact kind in question.¹ In such a case, according to Thomasson, the author must still have a substantive concept of what she intends to create, and this substantive concept specifies what the K-relevant features are. Whether the agent succeeds in producing a K can then be evaluated relative to whether what she produces actually instantiates the K-relevant features that are part of the concept guiding the agent in her creative act. Thomasson characterizes the relation between such an agent and the outcome of her intended action as follows:

In this case, clearly, there is no question of the artisan getting it right or wrong about what it would take to be a K, what features are K-relevant. At this stage, what is relevant to being a K is purely a matter for *invention* or stipulation by the artisan based on her goals or intentions; she is not trying to discover what makes something a K (so that she could then be said to get it right or wrong); instead, she is delineating a new kind by establishing success criteria for her activity. Thus she creates not only an artifact, but delineates a new artifactual *kind*, complete with normative success conditions for creating something of that kind (Thomasson, 2007: 60).

It is possible for an agent who attempts to produce a novel prototype to experience certain kinds of failure, according to Thomasson: for example, the outcome of her attempted creative act can fail to match the K-relevant features that are specified by the substantive concept guiding

¹ Preston (2013) describes a prototype as “the first full-scale model of a type or design of thing to be produced” (ibid: 164). While many prototypes do not involve significant innovation, as Preston notes, some of them do, namely prototypes which either implement a completely novel function or those which implement an existing function in a completely novel way (ibid: 165). In what follows, my focus is primarily on such novel, i.e., genuinely innovative, prototypes.

her creative act; and the agent can even fail to know whether or not she managed to follow through on her creative intentions successfully. But there are other kinds of mistakes and errors from which such an agent is shielded, in Thomasson's view, since it is the agent herself, through the substantive concept guiding her performance, who stipulatively sets the normative success conditions for her own attempted act of creation. For this reason, the relation such an agent bears to the outcome of her own action is comparable to that, say, of a parent who is naming their own child, rather than to that of a scientist who is investigating a chemical or biological kind. In the same way as a parent who names their own child cannot be wrong about what their child's name is, so an agent engaged in the attempted creation of a novel prototype similarly cannot be mistaken about what it is to be a K. In contrast, a scientist who is concerned with the study of a chemical or biological kind is not in the same way protected from massive error as to what features are relevant to determining membership in the natural kind in question (Thomasson, 2007: 60-61).

In what follows, I argue that the process of prototype production in fact allows for various sources of errors and failures on the part of agents attempting to carry out their creative intentions that are not adequately accommodated by author-intention-based accounts. The possibility of this kind of divergence between the intentions of authors and the outcome of their creative efforts calls for a different conception of prototype-production and of the nature of artifacts more generally. A natural candidate for such an alternative approach is Beth Preston's user-based account, according to which an artifact's kind-relevant features are determined by the practices of users and reproducers (Preston, 2013). As will emerge below, however, a user-based approach, like its author-intention-based counterparts, also suffers from an overly agent-centric orientation: despite their many interesting differences, both types of frameworks, for this reason, run into difficulties with scenarios in which the attitudes or dispositions of the relevant agents, whether they are authors, users or reproducers, do not serve as a reliable guide on which to base an artifact's classification as a member of a certain artifact kind. Such alternative categorizations, which conflict with both author-intentions and user-practices, demonstrate the need for a more object-centered alternative perspective concerning prototype production and the nature of artifacts

more generally. In the present context, my main focus is on establishing the negative point that existing frameworks do not provide us with the resources for non-agent-centric classifications of artifacts. The positive side of my proposal which explores a more object-centered approach to prototype production and the nature of artifacts more generally is developed elsewhere (see especially Koslicki and Massin, 2023).

Challenges for Author-Intention-Based Accounts

Author-intentions, as I have argued elsewhere, are in a number of respects not nearly as powerful and discriminating as accounts like Thomasson's make them out to be (Koslicki, 2018: Section 8.4, pp. 226-237). In what follows, I briefly describe four objections to author-intention-based accounts raised there. Below, we will take up the first objection in more detail, specifically as it pertains to the phenomenon of prototype production.

(1) User-Intentions. It appears to be possible, under certain circumstances, for the intentions or practices of the later users of an artifact to override the original author-intentions in determining what features are relevant to an artifact's membership in a certain artifact kind. Hilary Kornblith, for example, uses the following illustration to make this point:

[T]he person who first made carabiners may have had quite a different intention in making them than the users do in using them, and if the maker, now long gone, is the only one who ever had that intention, and all of the users have a different intention, then arguably the intentions which are connected to making the kind what it is are probably those of the users rather than the maker. [...] The maker could not insist, 'I know what these things are; after all, I made them', since the term is part of a public language which the maker cannot constrain through a sheer act of will (Kornblith, 2007: 145).

In the scenario Kornblith imagines the original author who created the first carabiner is the sole agent who ever intended that carabiners be used

to perform a function F (e.g., to serve as emergency brass knuckles to be used in self-defense), while every subsequent user intends that the device in question be used to perform a different function F' (e.g., as a quick and reversible connector of components notably in safety-critical systems). In these circumstances, so Kornblith reasons, it is plausible to think that the author's original intention, that carabiners have the kind-associated function F , is overridden by the intentions of subsequent users, according to whom carabiners have the kind-associated function F' . Author-intention-based accounts, however, are committed to holding that carabiners continue to have the kind-associated function F , rather than F' , despite the fact that no one other than their original author ever thought that carabiners should be used in the first way, and every subsequent user has employed them with the intention that they be used in the second way.

(2) Easy Ontology. Author-intention-based accounts are susceptible to the worry that, given their perspective, it might just be too easy to create new artifacts or artifact kinds. These approaches allow, for example, that in certain instances (e.g., “ready-mades” or “found objects”), a new artifact or artifact kind can be created by an agent simply by uttering certain words, thinking certain thoughts, or by inducing merely relational but non-intrinsic changes in the artifact's constituting matter. In certain scenarios, however, agents appear to be unable to bring into existence a new artifact or artifact kind by employing these methods. To illustrate, consider an agent who (for whatever reason) attempts to “convert” a pen into a thermometer merely by uttering certain words (e.g., “Let this be a thermometer!”), thinking certain thoughts (e.g., “I would really like it if this pen became a thermometer”), or by bringing about relational but non-intrinsic changes to the alleged artifact's constituting matter (e.g., by using a hook and a string to hang the item up on a wall near a window). In this case, the result of the agent's attempt to exercise their would-be creative intention is not a new item, a thermometer, albeit perhaps one that is *defective* or *malfunctioning*; rather, much more plausibly, the agent's attempted act of creation was simply unsuccessful and nothing new has been brought into existence at all. As it stands, however, it is unclear how author-intention-based accounts can provide systematic and principled criteria on the basis of which to distinguish successful acts of creation from other occasions on which an agent fails to exercise their would-be

creative intentions successfully and no new artifact or artifact kind is produced.²

(3) Mass-Production. In cases of mass-production, a single act of creation, governed by a single creative intention, can apparently lead to the production of multiple artifacts. To illustrate, on a given occasion, a baker can successfully execute their intention to bake twelve cookies, without being guided by a separate creative intention that is directed at each of the twelve cookies. In such a case, author-intention-based accounts seem to lack the resources needed to differentiate one cookie from another on the basis of their essential properties, given that (by hypothesis) neither the act of creation nor the creative intention governing it can apparently serve as a basis to distinguish individual cookies from one another. In such cases, Evinine (2016) assigns only a “collective” essence to the dozen cookies as a totality, without recognizing each cookie as having its own individual essence. As a consequence, no principled distinction can be drawn between individual mass-produced artifacts that result from the execution of a single non-individuating creative intention.³

(4) Scope. Intentional creative acts performed by human agents can sometimes leave in their wake unintended by-products, such as sawdust, pollution, trash, or scrap metal. In addition, a product can at times be brought into existence through non-intentional human activities, e.g., a drawing that results from mere “doodling”, a trail that is created when many walkers independently choose the same path, or a village that emerges over time when many houses are built in close vicinity to one another without an overarching plan. In other cases, non-human animals appear to be able to engage in purpose-driven productive activities which can give rise, for example, to birds’ nests, spider webs, or beaver dams. Finally, the domain of artworks presents us with cases in which human agents appear to engage in intentional productive activities whose results

²The concern that insufficient restrictions are placed on artifact-creation is examined in more detail, specifically as it pertains to Lynne Rudder Baker’s account, for example, in Baker (2002), (2004), (2007); Evinine (2016, especially pp. 110-118); Koslicki (2021); Sider (2002); and Zimmerman (2002).

³For further discussion of the phenomenon of mass-production and the difficulties it raises for author-intention-based accounts, see Evinine (2019).

are at least not obviously directed at the resolution of practical problems. Depending on the details of particular accounts, not all of these entities are classified as artifacts by author-intention-based approaches. Since the entities in question also do not obviously fit into previously recognized natural (e.g., physical, chemical, or biological) kinds, we are therefore left with a whole host of cases whose ontological status remains, as of yet, unsettled.

I take the foregoing considerations to indicate that author-intentions do not always possess the discriminating power and the authority that is ascribed to them by author-intention-based accounts to determine an artifact's kind-relevant features. As we have noted, it appears to be possible that the kind-determining work in question can sometimes be taken over by user-intentions and practices. Moreover, an appeal to author-intentions by itself turns out not to be sufficient to impose reasonable constraints on when an agent does or does not succeed in exercising their would-be creative intentions to produce a new artifact or artifact kind. The discriminating power of author-intentions is furthermore called into question by the phenomenon of mass-production where multiple artifacts are brought into existence as a result of a single non-individuating creative intention. Finally, author-intention-based accounts fail to deliver classificatory judgments in a range of cases which one might expect to be adjudicated by a successful theory of artifacts.

Can User-Intentions Override Author-Intentions?

As noted above, the process of prototype production in particular seems to allow for various sorts of deviations not recognized by author-intention-based accounts between an agent's creative intentions and the outcome of the agent's attempt to execute these intentions. To arrive at a more plausible and realistic conception of prototype production and, hence, of the nature of artifacts more generally, we must therefore develop a clearer understanding of the success and failure conditions governing agents who are engaged in prototype production, i.e., agents who are attempting

to bring into existence not only a new concrete particular object but also simultaneously a new artifact kind. In fact, it appears to be possible for an agent, who is engaged in prototype production, to succeed in producing an artifact belonging to a new artifact kind K_1 , even if she intends to produce an artifact belonging to a different not-yet-established artifact kind, K_2 . Such a scenario, as it stands, cannot be accommodated by author-intention-based accounts like Thomasson's, since an agent engaged in prototype production cannot simultaneously succeed in producing an artifact belonging to a new artifact kind and be radically mistaken about the nature of the artifact she managed to produce.

To illustrate, consider the following case involving Alexander Graham Bell's invention of the telephone, discussed in Koslicki (2018):

Suppose that Alexander Graham Bell, the inventor of the telephone, initially intended his new device to be used as an aid for the hearing-impaired, while later users came to think of the telephone as a certain kind of long-distance communication device which allows two or more users (whether they are hearing-impaired or not) to carry on a conversation even when they are far apart. Given author-intention-based accounts of artifact-essences, assuming that Alexander Graham Bell in fact intended the device he invented to have a certain function, viz., to aid the hearing-impaired, and assuming that there is no obvious reason to think that Bell's original author-intentions misfired during the production of the first prototype, then the device Bell invented *is* in fact a hearing-aid (and essentially so); and the same applies to every subsequent device which is successfully produced with the intention of being of the same type as the device Bell invented. Proponents of this view are committed to holding that the intentions of later users cannot override Bell's original author-intentions, according to which the device he invented is a kind of hearing-aid, and lead to a re-classification of the telephone as a certain kind of long-distance communication device. But the scenario under consideration suggests that it is in fact possible, under certain circumstances, for the intentions of later users to override the intentions of the original author as to how the device he or she has invented, designed or produced is to be used (Koslicki, 2018: 227-228).⁴

⁴The example is borrowed from Carrara & Vermaas (2009: 135), who suggest that the above description is historically accurate.

When discussing this case in Koslicki (2018), I consider several strategies which seem to be open to author-intention-based accounts to respond to the scenario just described: (i) the generalization strategy; (ii) the supplementation strategy; (iii) the disjunctive strategy; and (iv) the creation strategy.⁵

(i) The generalization strategy. The first strategy recommends re-describing the relevant author-intention in a way that is sufficiently general to avoid any apparent incompatibility between author-intentions and user-intentions. To illustrate, in the case at hand, the creative act in question might be characterized as being governed only by a general intention to the effect that the resulting device be used to convert sound into electronic signals, leaving open whether, once so converted, these electronic signals are then put to use to facilitate long-distance communication or to aid the hearing-impaired.

(ii) The supplementation strategy. The second strategy proposes to supplement the function specified by the original author-intentions with an additional function determined by the intentions and practices of later users. Thus, if later users employ the device Alexander Graham Bell invented primarily for the purposes of facilitating long-distance communication, then this use should be taken to specify a second function that is simply added to the original function which was determined by Alexander Graham Bell's author-intention, viz., that the device in question be used as a kind of hearing-aid. The result is an artifact that has either a single complex function (viz., to serve as a device that converts sound into electronic signals either for the purposes of long-distance communication or to aid the hearing-impaired) or two functions (viz., to be used as a long-distance communication device and to be used as a hearing-aid).

(iii) The disjunctive strategy. The third strategy retains the basic idea that an artifact's kind-relevant features are determined by agent-intentions, but removes the exclusive focus on the intentions of the original author. Instead, this strategy allows that an artifact's kind-relevant features can

⁵ Koslicki (2018: 228-229). The fourth strategy (Koslicki (2018: 229, fn. 11) was suggested to me by Simon Eynine (personal communication), who has since developed this line of reasoning further in Eynine (2022). We will have occasion to consider this response in more detail shortly.

also be determined by the intentions of other relevant agents, e.g., later users who establish a dominant practice to employ the device in question in a way that diverges from the use initially foreseen by the device's author. The disjunctive strategy thus opens up the possibility that the telephone could be classified as a long-distance communication device, in line with the intentions and practices of later users, rather than as a hearing-aid, following Alexander Graham Bell's original author-intentions.

(iv) The creation strategy. According to the fourth strategy, agents whom we might otherwise characterize as the later users of an already existing artifact would, in some cases, count as having themselves created a new artifact or artifact kind. To illustrate, given this strategy, we might redescribe the scenario cited above as involving two distinct kinds of artifacts, both of which are referred to as "telephones": the first kind of telephone was invented by Alexander Graham Bell for the purpose of amplifying sound to aid the hearing-impaired; the second kind of telephone was brought into existence by later users when they repurposed Alexander Graham Bell's original telephone and endowed it with a different function, viz., to facilitate long-distance communication.

As I observe in Koslicki (2018), the first three strategies do not yield satisfying responses to scenarios, such as that considered above, in which user-intentions appear to be able to override author-intentions in determining an artifact's kind-relevant features. The generalization strategy threatens to mischaracterize particular acts of creation as being governed by a more general intention (e.g., to build a device which converts sound into electronic signals), when the agent in question was in fact guided by a more specific intention (viz., to build a device which amplifies sound to aid the hearing-impaired). The supplementation strategy leads to the counterintuitive result that all those devices to which we now refer as "hearing-aids" are in fact classified as belonging to the same kind as the devices, currently known as "telephones", which facilitate long-distance communication, with the former being actually more in line with Bell's original author-intention than the latter. The disjunctive strategy is problematic in that it offers no resolution in cases in which original author-intentions seem to conflict with those of later users when it comes to an

artifact's kind-relevant features.⁶ While these three strategies therefore do not provide promising author-intention-based responses to the first objection, the creation strategy deserves closer attention, in particular given its recent development in Evnine (2022).

The Creation Strategy: Historicity and Counter-Use

Above, we discussed the concern, raised against author-intention-based accounts, that user-intentions and practices, under certain conditions, can apparently override the intentions of original authors in determining an artifact's kind-relevant features. In response to this challenge, Evnine (2022) develops a version of the creation strategy which extends the account previously offered in Evnine (2016) in two ways: first, by introducing the idea of "*historicity*", according to which an artifact essentially depends on certain of its salient historical and contemporary properties; and, secondly, by making room for the possibility that some instances of "*counter-using*" an existing artifact can themselves result in the creation of a new artifact or artifact kind.

Evnine's first extension, centered on the notion of "*historicity*", is based on the idea that an artifact in a certain sense "has history in it" (Evnine, 2022: 8). When Evnine speaks of an artifact's historicity, he has in mind a certain subset of the properties belonging to an artifact, its "*Common Salient Properties*" (CSP), namely those among the artifact's historical and contemporary properties that can be reasonably expected to be widely known and regarded as salient. Evnine's proposal is that an artifact essentially depends on having the properties in its CSP. To illustrate, if it is a widely known and salient fact about a particular Zippo lighter that this lighter was in Franklin D. Roosevelt's pocket at the time of his assassination, then the property in question (*viz.*, of having been in Roosevelt's

⁶We will have occasion below to consider in more detail a non-intention-based account of artifacts developed in Preston (2013), according to which questions concerning an artifact's kind-membership are resolved by appeal to user-practices, rather than by looking to the content of the intention guiding an artifact's original author in their creative act. (See also, for example, Preston (2009), (2018))

pocket at the time of his assassination), according to Evnine's proposal, belongs to the lighter's CSP and is therefore essential to the lighter.⁷

Secondly, by making room for the phenomenon of "counter-use", Evnine allows that the users of a pre-existing artifact can, in some cases, themselves become the authors of a new artifact or artifact kind. "Counter-use", as this notion is understood by Evnine, is a practice guided by a deliberate intention, typically (but not necessarily) held collectively by a community of agents, whose aim is to change existing norms governing the use of an object or type of object.⁸ To illustrate, suppose that a community of speakers standardly uses a particular word as a slur, i.e., in a derogatory way. A different community of speakers can then come along and initiate a practice of counter-using the existing word in a non-derogatory way. If the new practice takes hold and brings with it a different CSP, then counter-using the existing word has in effect ushered in the creation of a new word, with the same spelling and pronunciation as the old word, but with a different non-derogatory function. The standard use of the new word is now in line with the intentions of its authors, i.e., the community of agents who established the practice of using the first word in a non-standard way.

Evnine's extended account, when applied to the scenario discussed above, yields the following implementation of the creation strategy. Following the successful execution of his original author-intention, Alexander Graham Bell brings into existence a device, which comes to be known as a "telephone", whose function is to amplify sound to aid the hearing-impaired. Subsequently, a community of agents establishes a practice of counter-using this device in a non-standard way, not in line with Bell's original author-intentions, namely to facilitate long-distance communication among agents independently of whether they are hearing-impaired. Assuming that this new practice becomes established and leads to a reconfigured CSP, a new device, also known as a

⁷The example and Evnine's inspiration here come from a passage from Philip K. Dick's *The Man in the High Castle*, though the character speaking in the passage in question in fact intends to poke fun at the notion of "historicity", the idea that "a thing has history in it" (Dick, 1962: 63).

⁸Evnine's notion of "counter-use" is modeled after Sara Ahmed's notion of "queer-use", which concerns "how things can be used in ways other than for which they were intended or by those other than for whom they were intended" (Ahmed, 2019: 199).

“telephone”, comes into existence, whose function is to facilitate long-distance communication.

More generally, given Evnine’s extended theory, when an existing artifact is counter-used in ways that are incompatible with its standard use, e.g., the use it was intended to have by its original author(s), and provided that the practice in question takes hold and leads to a re-configured CSP, a new artifact or artifact kind is brought into existence whose standard use now aligns with the intentions of the former counter-users who have themselves become authors of the new artifact or artifact kind. The overall structure of Evnine’s response to scenarios in which user-intention can apparently override original author-intentions in determining an artifact’s kind-relevant features is thus to insert an additional layer of creation, now involving those agents who were previously designated as counter-users of an already existing artifact. The authority assigned to author-intentions in determining an artifact’s kind-relevant features can thereby be preserved in a way that appears to be compatible with the basic outlines of an author-intention-based account of artifacts.

A User-Based Account of Artifacts and Prototype Production

A very different account of prototype production, and the nature of artifacts in general, is presented in Preston (2013).⁹ Preston calls her approach “*sociogenerism*” to contrast it with the “*suigenerism*” adopted by proponents of what she refers to as “*the centralized control model*”. According to sociogenerism, an individual is formed by her society and would not be the individual she is without these societal influences. Suigenerism, by contrast, assumes that fully formed autonomous (“*sui generis*”) individuals exist prior to, and independently of, any social relationships into which they enter. When Preston speaks of the centralized control model,

⁹ Preston’s account is intended to apply not only to artifacts but to the broader category of “items of material culture”. This category, for Preston, includes items that are made by human agents (viz., artifacts) as well as natural things that are not made, but used, by human agents (Preston, 2013: 4–6). Preston uses the term, “designer”, to refer to agents I have been calling “authors”; and her term for “author-intention-based accounts” is “the centralized control model”.

she has in mind an approach which conceives of the process of production along the following lines: (i) an antecedent mental design phase, which specifies a plan, precedes a subsequent construction phase, which specifies how the plan in question is to be executed; (ii) the mental design is devised by an agent who engages in means-end deliberation aimed at the construction of a product; (iii) the design specifies the product's features and gives step-by-step instructions for how the product is to be constructed; (iv) the construction phase consists simply in the execution (ideally by way of a faithful copy) of the instructions provided during the design phase either by the designer or by some other agents (ibid: 30).

In action theory, so Preston argues, the centralized control model leads to a deeply engrained and, in her view, problematic tendency to analyze intentions as *plans*, i.e., mental constructs that are located, first and foremost, in the minds of individual agents and, only derivatively, in the minds of multiple agents. Agents who perform actions are then, in turn, conceptualized as *executing* these plans. In line with this approach, proponents of the centralized control model take artifact functions to be established by the intentions of the artifact's designer. In contrast to the *individualistic* orientation inherent in the centralized control model, Preston advocates a perspective which views human action as typically *collaborative*, and which assigns a less pronounced role to intention in her understanding of both action and the assignment of functions to artifacts. Sociality, in Preston's view, must be distinguished from cooperation and the former precedes the latter, since individuals who enter into collaborative relationships are always already socialized. In contrast to the *control* aspect emphasized by the opposing model, Preston offers an account which identifies *improvisation* as the primary structure underlying human action. Given the open-endedness and incompleteness of plans, *creativity* on the part of agents, in Preston's view, is called for throughout the process during which an action unfolds and is not confined merely to the phase in which an agent devises a plan that is to be executed.

Preston's sociogeneric approach also yields a radically different characterization of prototype production from that encountered earlier in the guise of the particular variants of the centralized control model considered above. In order to explain the assignment of functions to artifacts,

Preston endorses a pluralist conception of function which applies two complementary approaches developed for the case of biological function to the domain of artifacts: Robert Cummins' notion of function referred to in Preston (1998) as "*system function*" (Cummins, 1975); and Ruth Millikan's notion of "*proper function*" (Millikan, 1984, 1993). According to the first approach, functional analysis in biology proceeds by way of specifying the current capacities or dispositions which belong to a system (e.g., a biological organism) in virtue of the current capacities or dispositions exhibited by the components of the system (e.g., the organs of a biological organism). According to Millikan's causal-historical approach, in contrast, a trait counts as a proper function if it contributes to the survival or proliferation of the system or component in question.

In order to see how Preston's pluralist conception of artifact functions applies to the case of prototype production, let's imagine an agent who has just thought of a brand-new method by which to open tin cans designed for long-term food preservation, which were previously tricky to pry apart. The agent now sets out to construct the first-ever prototype of her newly invented device, which she calls a "can-opener". If all goes well, the outcome of the agent's creative act is a product which is in fact able to implement the agent's novel strategy for opening cans. In that case, the assignment of the function in question to the novel device can be explained, so Preston argues, by appeal to Cummins' notion of system function: independently of what the agent may or may not have intended, the system function of the can-opener is based on the current capacities or dispositions the device has in virtue of the current capacities or dispositions of its component parts (i.e., its handle, the sharp rotating cutting wheel, etc.). Since, by hypothesis, the agent manages to fashion a product which successfully implements her newly devised strategy for opening cans, the function ascribed to the device in question is in fact among the item's current capacities or dispositions.

Suppose, however, that something goes wrong in the agent's attempt to produce the first-ever prototype can-opener and the outcome of her attempted creative act is an item which fails to implement the agent's novel strategy for opening cans. (Perhaps, with enough force or ingenuity, the item in question can still be used to pry open cans; however, or so I will assume, the item is no better at performing this task than other

metal devices, e.g., screwdrivers, which are not normally classified as can-openers.) In that case, Cummins' notion of system function, with its appeal to the current capacities or dispositions associated with a system and its component parts, is of no help. But neither is Millikan's causal-historical notion of proper function: for, in a case of prototype production, no prior history of use or reproduction has as-of-yet been established to which the attribution of a proper function to the novel device could be anchored. Outside of cases of prototype production, Millikan's notion of proper function comes in handy in cases of *malfunction*, when a history of actual use and reproduction can be used to supply the normative content implicit in ascribing a proper function to a device (e.g., a broken corkscrew), even one that is in fact unable to carry out the function in question. In a case of prototype production, however, a claim about what items of the kind in question are *supposed* to do (whether or not they are in fact able to do it) cannot make reference to the use to which previous members of the same kind have already been put, since by hypothesis the artifact kind in question has only just been established.

Neither of the two approaches to biological function utilized in Preston's account of artifact function thus can be used to motivate the ascription of a function to the item we imagined in the second scenario, viz., the first-ever can-opener prototype which fails to implement the agent's novel strategy for opening cans successfully. The only other option for how an ascription of a function to a malfunctioning prototype could be motivated, viz., to anchor the ascription in question to the designer's intentions, is of course one that Preston rejects and against which she argues at length. Therefore, when confronted with a prototype that is unable to realize the designer's novel idea, Preston recommends that we resist the temptation to ascribe any kind of function at all to the device in question. The first-ever can-opener prototype which fails to implement the designer's novel strategy for opening cans lacks both a proper function (given the absence of an actual pattern of use and reproduction) and a system function (given that opening cans using the inventor's novel strategy is not among the device's current capacities or dispositions). Since Cummins-style system functions and Millikan-style proper functions exhaust our options, on Preston's account, for how an ascription of a function to an artifact could be motivated, there is no other basis on

which a function could be ascribed to the device in question, and it therefore lacks a function altogether. Preston summarizes her response to the scenario at hand as follows:

Fortunately, there is a simpler and more workable alternative. We can disregard our intuitions and stop insisting that novel prototypes have proper functions. Indeed, this is what we should do, since, as we discovered above, the antecedents of this insistence are suspect. Instead, we can analyze novel prototypes the same way as novel uses of existing items. If the novel prototype or innovatively used item performs successfully, it has a system function. *A novel prototype or innovatively used item that does not perform successfully has no function, either proper or system.* In the course of time, the copies of a novel prototype that is reproduced and proliferates on account of its successful performance acquire a proper function, just as a novel use of an existing item may become a proper function over the course of time. This alternative is non-intentionalist, in the sense that it appeals to systematic material culture contexts, on the one hand, and processes of reproduction, on the other hand, rather than to the unmediated intentions of individuals. It has the signal advantage of preserving the phenomenologically well-attested parallels between design and innovative use. In particular, it does not run afoul of the fact that much of what is classified as design actually consists of innovative uses of various sorts. But most importantly, from our point of view, it preserves the phenomenologically and theoretically well-grounded distinction between proper function and system function which is threatened by intentionalist theories should they fail—as we have argued they do fail—to articulate a real and significant difference between users' intentions and designers' intentions (ibid: 176-177; my emphasis).

Preston's explicit concern is with the question of how a function ascription to a novel prototype could be motivated, rather than with the question of how a novel prototype might be classified as belonging to a certain artifact kind. However, given the response to our imagined scenario favored by Preston, it now also becomes difficult to see on what basis the first-ever prototype which fails to implement the designer's new strategy to open cans could be assigned to the supposedly novel artifact kind, *can-opener*, or, for that matter, to any other artifact kind. Since the device in

question lacks a (proper or system) function and the designer's intentions are not an available option on which such a classificatory judgment could be based, it is unclear to what other considerations one might appeal, within the confines of Preston's user-based framework, in order to justify categorizing the device in question as a can-opener, or as some other type of artifact, more generally. Given Preston's approach, the only other candidate for how the item in question could be classified as a can-opener, albeit one that fails to live up to the designer's expectations, is to refer to patterns of actual use and reproduction. But these are of course, as of yet, non-existent, since, by hypothesis, the designer in question has only just attempted to implement her novel method for opening cans for the very first time. Unless the device's classification as a can-opener can be justified on principled grounds, however, other crucial questions which might reasonably be expected to be settled by appeal to the item's kind-membership, e.g., its persistence conditions or modal profile more generally, are equally left unanswered.¹⁰ Preston's account therefore places us in the uncomfortable position of having to recognize concrete particular objects, viz., members of novel artifact kinds, whose nature, including its kind-membership, appears to be not fully determined.

The Limits of Agentive Authority

We now have on the table two very different approaches to the phenomenon of prototype production and the nature of artifacts more generally: an author-intention-based account, in the extended formulation offered by Evinine; and a user-based account, as developed by Preston. My goal, in the remaining section, is to argue that both of these approaches ultimately suffer from the same underlying shortcoming: namely their tendency to overestimate the epistemic and ontological authority that should be assigned to the attitudes or dispositions of agents, whether their status is that of authors or that of users or reproducers, in determining the

¹⁰ See Koslicki (2023a), (2023b), (2023c), and Koslicki and Massin (2023) for further discussion of the connection between the essence of a thing and its kind-membership, persistence conditions, and modal profile more generally.

kind-relevant features of an artifact or artifact kind. To advance this argument, we will, in what follows, consider a further scenario which is intended to show that, in some cases, neither author-intentions nor user-practices can serve as a reliable guide on which to base our classificatory judgements concerning a particular artifact or artifact kind.

Consider a subclass of artifacts which includes, for example, amulets, voodoo-dolls, evil eyes, and perpetual motion machines. For the sake of simplicity, I will focus on the first case involving amulets; but my reasoning, as it applies to this case, is meant to be more general and to carry over to other similar instances of the same broader phenomenon.¹¹ For the sake of the argument, let's suppose that, on a particular occasion, an agent exercises her intention to create the very first prototype of a type of artifact she calls an "amulet", and which, according to the agent's own understanding, has the function of warding off evil spirits. (More specifically, we might imagine that the agent expects the artifact in question, when worn around a person's neck, to protect its wearer from harm caused by evil spirits.) When the agent finishes, she is under the impression that her work was successful and that she managed to produce an artifact which is able to implement her novel strategy for warding off evil spirits. The product of this agent's intentional act of creation catches on and, after a while, a practice is established in which other agents standardly reproduce and use artifacts of the same type, which are now universally referred to as "amulets", in a way that remains faithful to the intentions of its original author, namely (as these agents would similarly put it) for the purpose of warding off evil spirits. In fact, however, or so we may assume, there are no evil spirits and, therefore, both the intentions of the original author and the subsequent practice of reproducing and using the artifacts in question in accordance with the intentions of the artifact's original author in a sense "misfire": for, given the non-existence of evil spirits, the artifacts in question are unable to succeed in performing the task of protecting their wearer from harm caused by evil spirits by manifesting the

¹¹ Cases of this sort are also discussed, for example, in Baker (2007), particularly in connection with the phenomenon of malfunction (ibid: 55-57); in Evnine (2016) (see especially Section 4.1.2 on "failures", pp. 125-128); and in Preston's work, particularly under the heading of what she calls "phantom function" (Preston (1998), (2009), (2013), (2018)). Preston's notion of phantom function is also taken up, for example, in Holm (2017) and Parsons (2016).

ability that is falsely ascribed to them both by their original author and by the community of agents who continue to reproduce and use the items in question in line with the intentions of the original author.¹²

The scenario just outlined now presents us with the following classificatory challenge: To what artifact kind (if any) do the items described above belong? And who (or what) has the authority to determine their kind-relevant features? If we did not already find ourselves in the grip of an author-intention-based or user-based framework, the natural reaction to this case, I take it, would be to diagnose both the original author and the subsequent community of reproducers and users as suffering from a certain kind of illusion and, therefore, as being mistaken in their practice of classifying the artifacts in question. For suppose that we were to grant the authority to determine the artifact's kind-relevant features either to the intentions of the original author (following an author-intention-based account) or to the subsequent community of reproducers and users (following a user-based account). In that case, we would expect that the classification of the artifacts in question as so-called "amulets" should be based (at least in part) on the device's alleged ability to ward off evil spirits, as a kind-relevant feature. In fact, however, given that (by hypothesis) there are no evil spirits, the items in question lack the ability that is falsely ascribed to them by both their original author and the subsequent community of reproducers and users. Therefore, we would be mistaken in classifying the items in question as belonging to whatever artifact kind they in fact belong to on the basis of the kind-relevant feature that is incorrectly attributed to them by both their original author and the subsequent community of reproducers and users. Rather, given that the devices in reality lack the ability to ward off evil spirits, we might instead be tempted to classify these items in accordance with their actual or potential use, e.g., to serve a purely ornamental role, and therefore as

¹² Note that the function that is falsely ascribed to so-called "amulets" is not that the items in question *make people believe* that they have the power to protect agents who wear them from harm caused by evil spirits. This latter condition is one that, in the scenario described, truly applies to the items in question. However, given our hypothesis, this latter condition is not what drives the original author's creative act or the subsequent practice of use and reproduction.

being more properly assigned to an artifact kind whose kind-relevant features are in line with this assessment, e.g., the kind, *jewelry*.^{13,14}

To compare, consider the case of what is known as “holy water”. According to atheists, so-called “holy water” is just ordinary water, albeit ordinary water with interesting relational properties and a particular causal history which includes for example actions performed by priests in religious contexts. Theists, however, or so we may suppose for the sake of the analogy, might argue that what they call “holy water” should be classified as belonging to a category distinct from that of ordinary water. Theists may agree that what they call “holy water” originates from ordinary water, as a result of the latter’s being blessed by a member of the clergy. But once this ceremony has been performed, the resulting substance is one which, in the mind of the theist, has distinct and special cleansing or purifying powers, not shared by ordinary water, which can then be harnessed in baptisms or other rituals. For the sake of the analogy, however, we may suppose that, as in the amulet-case discussed above, theists are in fact mistaken in attributing special supernatural powers to what they call “holy water”. In that case, the theist’s proposed classification of so-called “holy water” as belonging to a category that is distinct from that of ordinary water should similarly be resisted, since the theist’s

¹³The proposed alternative classification of so-called “amulets” as mere pieces of jewelry with a purely ornamental value is intended merely as an *illustration* of how one might classify the artifacts in question in a way that conflicts with the function these artifacts are taken to have by their original author as well as by their subsequent users and reproducers. As noted earlier, my primary goal, in the present context, is to argue for the negative point that neither author-intentions nor user-practices seem to yield the correct result concerning the classification of so-called “amulets” and we should therefore be open to exploring alternative strategies for determining an artifact’s kind-relevant features. Any such positive proposal concerning the classification of these artifacts, which diverges from those considered here, will of course require its own separate defense (see Koslicki and Massin (2023) for further discussion).

¹⁴Of course, regardless of how these questions concerning the correct classification and function ascription are resolved, agents can (and very well may) continue to refer to the artifacts in question as “amulets”; and, quite possibly, in the minds of these agents, the meaning of the term, “amulet”, is definitionally tied to the satisfaction of a condition (e.g., “being capable of protecting a person from evil spirits, when worn around the person’s neck”) which reflects their attitudes and dispositions towards items to which they apply the term, “amulet”. But these semantic facts do not by themselves answer the ontological question of whether there in fact is a genuine and distinct artifact kind to which the term, “amulet”, applies; or, if so, what function (if any) should be ascribed to the items that belong to it.

classificatory judgment is based on an incorrect ascription of allegedly kind-relevant features to what is in fact just ordinary water.

An alternative classification, such as that of so-called “amulets” as merely ornamental pieces of jewelry, would be difficult to defend from the perspective of an author-intention-based or user-based account, given that it in fact conflicts with the function that is falsely ascribed to these items by the relevant community of agents who engage with these items, viz., their original authors as well as their subsequent users and reproducers. Applying Preston’s user-based account to the outcome of the original author’s attempt to fashion the first so-called “amulet” prototype, we arrive at a result that is reminiscent of the conclusion reached previously in connection with the malfunctioning can-opener prototype. Though the reasons for the failure in question are different in the two scenarios, in both cases the relevant agent does not in fact succeed in implementing their strategy in such a way that the product of their would-be creative activity is able to manifest the ability in question and perform the desired task. In the case of the malfunctioning can-opener prototype, the reasons for the agent’s lack of success are, as we might put it, purely mechanical: the device produced by the agent simply lacks the right material parts, or the material parts in question are not arranged in the right way, to allow the device in question to perform the task of opening cans in the novel manner envisaged by the agent. By contrast, in the amulet-scenario, the original author’s lack of success is due not merely to a mechanical failure: even if the agent had used different material parts, or had arranged the item’s material parts in a different way, the device in question still would not have been able to implement the agent’s novel strategy for protecting its wearer from harm caused by evil spirits. Rather, the difficulty in this case is, as it were, more “existential” in nature: since (by hypothesis) there are no evil spirits, the agent cannot succeed in implementing their strategy regardless of which material parts are selected or how these material parts are arranged. Despite the difference in how the failure in question is to be explained, however, the overall outcome remains the same: Preston’s user-based account provides us with no basis on which a function ascription to the novel prototype in question could be motivated. As Preston puts it in the passage cited above, “[a] novel prototype or innovatively used item that does not perform successfully has no function, either

proper or system” (Preston (2013: 176). The device lacks a Cummins-style system function to protect its wearer from harm caused by evil spirits, since it does not have the current capacity or disposition, derived from the current capacities or dispositions of its parts, to do so. Nor is there an actual causal history of warding off evil spirits which could license the ascription of a Millikan-style proper function to the item in question. In fact, given that we are dealing with an attempted case of prototype production, the option of linking the ascription of a proper function to an existing causal history, even one involving the manifestation of a different capacity, is in any case not available. As in our earlier scenario, in the absence of a function ascription, Preston’s user-based account therefore also leaves us in limbo when it comes to the classification of the novel prototype in question as belonging to a particular artifact kind.

Once an actual history of use and reproduction has been established, however, Preston’s user-based account does make room for the ascription of a proper function, in an extended sense, even in cases in which the item in question is in fact unable to perform successfully the function that is ascribed to it. Such cases fall under the heading of what Preston calls “phantom function”. Phantom functions, according to Preston, are applicable when “a type of artifact is regularly reproduced to serve a specific function, but no exemplar of it has ever been structurally capable of performing that function, or, in the nature of things, ever will be” (Preston, 2009: 217). Often, in such cases, the failure in question will eventually come to light and the items will cease to be used and reproduced for the purpose with which they are mistakenly associated. To illustrate, the tapered tail of old racing cars was initially thought to lead to a more aerodynamic performance; but once it became apparent that the design was based on a false theory of drag, the practice in question was discontinued (Griffiths, 1993: 420-421). As Preston notes, however, in other cases, particularly those which are of direct relevance to the amulet-scenario currently under discussion, such items as good luck charms, artifacts with religious significance, popular remedies and the like may continue to be used and reproduced to perform a phantom function, despite the fact that no exemplar of the kind in question has (or will) ever in fact successfully perform the phantom function in question.

Thus, fengshui mirrors continue to be used and reproduced for the purpose of deflecting “bad qi”, even though arguably no such mirror ever has (or will) manifest the trait in question. Similar observations apply to rabbits’ feet that are worn as good luck charms; bug zappers that are taken to be effective against mosquitoes; or vitamin C that is administered for the purpose of preventing colds (Preston, 2013: 177). In these cases, Preston advocates that an ascription of a proper function, in the following extended sense, is nevertheless justified:

A current token of an item of material culture has the proper function of producing an effect of a given type just in case producing this effect (whether it actually does so or not) contributes to the best explanation of the patterns of use to which past tokens of this type of item have been put, and which in turn have contributed to the reproduction of such items (Preston, 2013: 186-187).

Thus, in cases in which an item in fact does not (and never will) successfully manifest the function that is ascribed to it, the item’s phantom function nevertheless counts as its proper function, in the extended sense just cited, if the ascription of the phantom function best explains the actual patterns of use and reproduction surrounding the type of artifact in question.¹⁵

When applied to the amulet-scenario, Preston’s extended account cannot be used to underwrite an attempt to classify the artifacts in question in an alternative way (e.g., as merely ornamental pieces of jewelry which lack any special supernatural powers), which conflicts with the attitudes and dispositions of the relevant community of agents. For, as long as the attribution of the phantom function (*viz.*, to protect its wearer from harm caused by evil spirits) best explains the actual pattern of use and reproduction surrounding so-called “amulets”, this imagined effect has as

¹⁵The analysis of phantom functions offered in Preston (2013) diverges from her earlier treatment of this phenomenon in Preston (1998), according to which function ascriptions should be based on successful performances of a trait, even if in some cases this leads to the consequence that users and reproducers are mistaken in their attribution of a function to an artifact. Thus, following Preston’s earlier account, while bug zappers lack the proper function of specifically killing mosquitoes that is mistakenly attributed to them, it is possible to ascribe to them the proper function of killing other types of insects, since the latter corresponds to a effect they in fact successfully bring about (Preston, 1998: 246).

much of a claim to being considered to be the item's proper function as it would if so-called "amulets" in reality had the ability to bring about the effect in question. As Preston puts it, "the proper function is the effect the item of material culture would have to have to make sense of the pattern of use to which it is put" (Preston, 2013: 186), regardless of whether the item in question in fact has been or can be used to achieve the effect in question. To diagnose the existing classification of so-called "amulets" as being, in some sense, pathological, due to the fact that it is based on the mistaken attribution of a non-existent trait, could only be motivated, on Preston's account, once a future generation of agents is no longer subject to the prevalent illusion and establishes a new practice in which the items in question are knowingly reproduced and used for a different purpose. Until then, the existing practice of using and reproducing so-called "amulets", guided as it is by mistaken beliefs in their alleged supernatural powers, cannot be regarded as being defective relative to the task the items in question are currently meant to accomplish, viz., to protect their wearer from harm caused by evil spirits. Preston's user-based account, therefore, does not license a correction of the existing function ascription; nor, consequently, does it deliver a basis for an alternative classificatory judgment in the case at hand.

When approached from the point of view of Evinine's author-intention-based framework, an alternative classification, such as that of so-called "amulets" as mere pieces of jewelry with a purely ornamental value, appears similarly out of reach. Since we supposed above that the practice of subsequent users and reproducers of so-called "amulets" remains faithful to the intentions of the original author, the new element of "counter-use" introduced into Evinine's extended account is simply irrelevant to the characterization of the case at hand. Our classificatory judgment in this case must therefore rely either on the second novel component of Evinine's extended account, viz., the idea of "historicity", or on other features that were already present within the non-extended account. No doubt, based on the description of the amulet-scenario provided above, the feature of being *believed* to have special supernatural powers to repel evil spirits should count as an excellent candidate for inclusion in the set of salient historical and contemporary properties associated with so-called "amulets" which can be expected to be widely known among the relevant

community of agents who engage in the practice of using and reproducing the items in question. According to Evnine's extended account, the property in question therefore belongs to the CSP associated with so-called "amulets"; and, as a consequence, it is essential to these artifacts that they are widely believed to have special supernatural powers to protect their wearers from harm caused by evil spirits. Nevertheless, since (by hypothesis) the items in question in fact lack the special supernatural powers that are falsely ascribed to them by the relevant community of agents, the property of actually *having* these supernatural powers cannot be taken to belong to the CSP associated with so-called "amulets"; and, for this reason, this property, which we might have otherwise expected to give rise to a function ascription, cannot be regarded as partially determinative of the kind-relevant features on the basis of which so-called "amulets" can be classified as belonging to a particular artifact kind.

What, then, are the kind-relevant features of so-called "amulets", given Evnine's perspective, on the basis of which they should be classified as belonging to a certain artifact kind? Despite the prominence of author-intentions in his account, Evnine agrees that there is a need for additional "objective", i.e., non-author-centric, success and failure conditions which can be invoked in certain difficult cases, such as the amulet-scenario presently under discussion, to differentiate between instances in which an author succeeds and instances in which an author fails to execute their creative intentions to bring into existence a new artifact or artifact kind (Evnine (2016: 125-128). As Evnine notes, we cannot in general simply take an author's word for whether or not she has succeeded in her attempted act of creation. An "eccentric" agent, for example, who is a bad judge of her own work, may be convinced that, by imposing a certain shape on a lump of butter, she has succeeded in bringing into existence an airplane (ibid: 125). Moreover, given the phenomenon of malfunction, whether a particular attempted act of creation counts as successful or not, in Evnine's view, also cannot in general be tied to the question of whether its product is in fact able to perform the kind-associated function (ibid: 126). Some cases of failure, in which something objectively speaking goes wrong in an agent's attempt to execute their creative intentions, can be handled, so Evnine suggests, by invoking a resemblance relation between a newly created artifact and already existing members of the same artifact kind. In this way, for example, a shoe that cannot be

worn (e.g., because its maker, for whatever reason, decides to insert spikes into it) can nevertheless be classified as a shoe, i.e., as something that has the relevant kind-associated function despite the fact that this particular item cannot in its current state perform the kind-associated function in question, based on the fact that the item in question resembles already existing shoes, many of which can in fact be worn on human feet (ibid: 126). This strategy, however, as Evnine acknowledges, will not work across the board, given that in cases of prototype production there are as of yet no existing members of the artifact kind in question to which the newly created exemplar could bear a resemblance relation. Particularly puzzling in this respect are cases, like the amulet-scenario, in which the item that is produced lacks the function that is falsely ascribed to it and is therefore unable to perform the task for which it was intended.

In connection with the case of so-called “amulets”, Evnine puts forward the following proposal:

It will be apparent that there will be a problem in accounting for prototypes, or first instances, of kinds the associated functions of which were not, and perhaps could not have been, performed by anything. In these cases what allows the coming into existence of a new type, and hence of objects falling under that type, will have to rely on *belief that the object made performs the relevant function, in other words, on some kind of acceptance condition*. Here is it plausible to see a source of objectivity (ruling out the acceptance of an eccentric maker as sufficient for success) deriving from a requirement that *the acceptance be to some degree widely shared in the maker's social environment*. This must surely have been what happened in the case of *amulets*. This seems to me to underwrite a sense in which artifacts like amulets are *social* in a way that chairs are not (though of course there may be a broader sense in which chairs are social too) (ibid: 127; my italics).¹⁶

¹⁶A further possibility, which Evnine considers in the section devoted to “failures” (ibid: Section 4.1.2, pp. 125-128), is that an attempt at engaging in an intentional creative act may fail by resulting in what Hilpinen (1993) calls “scrap” (Evnine, 2016: 127-128). The category of scrap, as Evnine understands it, includes, on the one hand, residue that is generated as a side-effect of what may be a successful act of creation, e.g., wood shavings that come about as a by-product of successfully crafting a piece of furniture. On the other hand, scrap also encompasses what is left over when nothing at all is in fact produced, e.g., wood that is left over when an agent attempts to make a piece of furniture but does not succeed in bringing a new object into existence. As the passage just cited brings out, however, Evnine does not take this option to be relevant to the case of so-called “amulets”, since he allows that in this case a new artifact and a new artifact kind can be brought into existence.

Evnine's recommendation, for the case at hand, thus is the following. In a case of attempted prototype production, in which an agent produces an artifact which is in fact unable to carry out the kind-associated function that is falsely ascribed to it by the agent in question, membership in the relevant category is instead determined on the basis of the following two kind-relevant features: first, an "acceptance condition", according to which the artifact's original author *believes* that the item is able to carry out the relevant function; and, secondly, an additional requirement according to which "the acceptance be to some degree widely shared in the maker's social environment" (*ibid.*). It is the presence of the second feature, in Evnine's view, that gives rise to a kind of artifact that has a more pronounced *social* nature than what we might otherwise expect to find in cases, e.g., that of an "ordinary" chair, in which the second condition is not satisfied.

As should be obvious, however, neither of the two conditions proposed by Evnine results in a mechanism for determining an artifact's kind-relevant features which would make room for the possibility of reaching a classificatory judgment in a particular case that conflicts with the attitudes and dispositions that are held by the artifact's original author or by other members of this agent's community. As in the case of Preston's user-based framework, Evnine's account, despite its recognition of the need for objective success and failure conditions, does not provide us with the resources needed to capture the sense in which, in the amulet-scenario, the relevant agents are in fact mistaken in classifying artifacts as so-called "amulets" based on the erroneous assumption that these items have special supernatural powers which they in fact lack. Such mis-characterizations, however, are at the very least a live possibility (if not, arguably, a reality), and therefore cannot be ruled out as a matter of principle. As a result, we must impose limits on the epistemic and ontological authority that is assigned to agents, regardless of whether they are authors or users and reproducers, in determining an artifact's kind-relevant features. The imposition of such constraints on agentive authority concerning the classification of artifacts, however, requires us to depart from the two types of frameworks considered here and to look instead for a less agent-centric

alternative to author-intention-based and user-based accounts of prototype production and the nature of artifacts more generally.¹⁷

Conclusion

In sum, I take the considerations discussed in the preceding sections to indicate that both author-intention-based approaches and user-based approaches, despite their success in a wide range of cases, do not, as it stands, yield a fully satisfactory account of artifacts and prototype-production. Contrary to Thomasson's view, agents who are engaged in prototype production ought not to be regarded as stipulatively setting the normative success conditions for their own attempted acts of creation, through the substantive concept guiding their performance. Nor can we always rely on established practices of using and reproducing a type of artifact for a certain purpose to arrive at an accurate function ascription or artifact classification. Both author-intention-based and user-based approaches are marred by an overly agent-centric orientation when it comes to the determination of an artifact's kind-relevant features. Instead, what appears to be needed is a more object-centered perspective, i.e., an approach which puts greater emphasis on artifactual objects and their

¹⁷ Baker, Evnine, and Preston emphasize that, in the case at hand, it appears to be *physically impossible* to carry out the kind-associated function that is falsely ascribed to the artifacts in question. A similar observation might apply more generally not only to other cases involving the alleged presence of supernatural powers (e.g., voodoo-dolls, evil eyes, and the like); but also to cases, such as so-called "perpetual motion machines", which do not require the alleged presence of supernatural powers. The fact that the falsely attributed powers, if manifested, would violate the actual laws of nature, however, strikes me as a detachable feature of these cases. An illustration of what I have in mind might be provided by the so-called "Baghdad Battery", brought to my attention by Ludger Jansen (personal communication). As reported for example in Eggebrecht (2016), the case in question involves ancient clay pots which were found by archeologists in Iraq in 1936 and which seem to be able to function as batteries, despite the fact that they were fashioned and used long before any sophisticated scientific understanding of electricity was developed. If the items in question are in fact correctly classified as batteries, as at least some archeologists seem to hold, then the kind-relevant features in question cannot be read off the attitudes and dispositions of agents who were engaged in the practice of producing, using, or reproducing the items in question. Nevertheless, the manifestation of the capacities in question does not violate any actual laws of nature, as is shown by our acceptance of modern-day batteries as a respectable artifact kind. Due to the highly complex and controversial nature of this case, I defer a more detailed examination of the very interesting issues it raises to a future occasion.

capacities themselves, as opposed to the mental states and actions of agents who make or use these artifacts. As noted above, in order to account for the phenomenon of malfunction, the conception of which capacities are relevant to determining an object's membership in an artifactual kind cannot be confined only to its actual or current capacities; rather, we must broaden our perspective to include also an object's potential capacities, i.e., those it could manifest if it were to be repaired or otherwise modified in a way that is compatible with its kind-membership.

A promising direction for understanding the distinction between an object's actual and potential capacities, in my view, is provided by Barbara Vetter's account of "*iterated*" and "*non-iterated potentialities*": an iterated potentiality, roughly, is a potentiality for further potentialities (Vetter, 2015: 135-139). In contrast, a non-iterated potentiality, on this account, is a potentiality an object already possesses in its current state without first having to acquire another potentiality. To illustrate, a person who has not yet learned how to play the violin lacks the non-iterated potentiality to play the violin, but nevertheless has the iterated potentiality to play the violin: she has the potentiality to acquire the potentiality to play the violin by learning how to play the violin. By appeal to this distinction, a malfunctioning can-opener prototype, for example, can be characterized as a device which has a certain iterated potentiality, without also in its current state possessing the corresponding non-iterated potentiality, e.g., to open cans in the novel manner envisioned by its author. A malfunctioning can-opener prototype thus has the potentiality to acquire the relevant potentiality, viz., by being repaired or otherwise modified in an appropriate manner that is compatible with the constraints dictated by its essence. In this way, the device's iterated potentiality can then serve as a basis for classifying the malfunctioning prototype as a can-opener, despite the fact that it cannot in its present state be used to implement the agent's novel strategy for opening cans. Such a non-agent-centric account of course faces many challenges, not least of which is the question of how to distinguish an artifact's *function*, on the one hand, viz., those (actual or potential) capacities which serve as the basis for classifying a device as belonging to a certain artifactual kind (e.g., a screwdriver's capacity to be used to tighten and loosen screws), from the nearly endless

variety of other *accidental uses* to which an artifact can be put, on the other hand (e.g., a screwdriver's capacity to be used as a weapon) (Wakefield (2005)). A more detailed development of the positive suggestions briefly hinted at here will, however, have to await another occasion.¹⁸

References

- Ahmed, S. (2019). *What's the Use? On the Uses of Use*. Duke University Press.
- Baker, L. R. (2002). On Making Things Up: Constitution and Its Critics. *Philosophical Topics*, 30(1), 31–51.
- Baker, L. R. (2004). The Ontology of Artifacts. *Philosophical Explorations*, 7(2), 99–111.
- Baker, L. R. (2007). *The Metaphysics of Everyday Life: An Essay in Practical Realism*. Cambridge University Press.
- Carrara, M., & Vermaas, P. (2009). The Fine-Grained Metaphysics of Artifactual and Biological Functional Kinds. *Synthese*, 169, 125–143.
- Cummins, R. (1975). Functional Analysis. *The Journal of Philosophy*, 72, 741–764.
- Dick, P. K. (1962). *The Man in the High Castle*. Putnam.
- Dipert, R. R. (1993). *Artifacts, Art Works, and Agency*. Temple University Press.
- Eggebrecht, Harald. (2016). Dem Geheimnis auf der Spur: Der Ur-Strom”, *Süddeutsche Zeitung*, published online, 29 July 2016, URL = <https://www.sueddeutsche.de/leben/dem-geheimnis-auf-der-spur-der-ur-strom-1.3098384>
- Evnine, S. (2016). *Making Objects and Events: A Hylomorphic Theory of Artifacts, Actions, and Organisms*. Oxford University Press.
- Evnine, S. (2019). Mass Production. In B. Brewer & J. Cumpa (Eds.), *The Nature of Ordinary Objects* (pp. 198–222). Cambridge University Press.
- Evnine, S. (2022). The Historicity of Artifacts: Use and Counter-Use. *Metaphysics*, 5(1), 1–13.
- Griffiths, P. E. (1993). Functional Analysis and Proper Functions. *The British Journal for the Philosophy of Science*, 44, 409–422.

¹⁸For other work that is relevant to the development of the proposal briefly outlined above, see for example Koslicki (2021), (2023a), (2023b), (2023c), and and Koslicki and Massin (2023); Vetter (2020).

- Hilpinen, R. (1993). Authors and Artifacts. *Proceedings of the Aristotelian Society*, 93, 155–178.
- Hilpinen, Risto. (2011). Artifact. *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition) Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/win2011/entries/artifact/>
- Holm, S. (2017). The Problem of Phantom Functions. *Erkenntnis*, 82, 233–241.
- Kornblith, H. (2007). How to Refer to Artifacts. In E. Margolis & S. Laurence (Eds.), *The Creations of the Mind. Theories of Artifacts and Their Representation* (pp. 138–149).
- Koslicki, K. (2018). *Form, Matter, Substance*. Oxford University Press.
- Koslicki, K. (2021). The Threat of Thinking Things Into Existence. In L. R. G. Oliveira & K. J. Corcoran (Eds.), *Commonsense Metaphysics: Essays in Honor of Lynn Rudder Baker* (pp. 113–136).
- Koslicki, K. (2023a). Metaphysics: The Science of Essence? In J. Cumpa (Ed.), *The Question of Ontology*. Oxford University Press.
- Koslicki, K. (2023b). Essentialism vs. Potentialism: Allies or Competitors? In T. Buchheim (Ed.), *Kontroversen, Philosophisches Jahrbuch*. Alber-Verlag., 129. Jahrgang, Heft 2 (2022), pp. 139–152. <https://doi.org/10.5771/0031-8183-2022-2-325>
- Koslicki, K. (2023c). Modality and Essence in Contemporary Metaphysics. In Sam Newlands and Yitzhak Melamed (eds.), *Modality: A Conceptual History*. (Oxford Philosophical Concept Series) Oxford, Oxford University Press.
- Koslicki, K., & Massin, O. (2023). Artifact-Essences: A Capacity-Based Approach. In Preparation.
- Millikan, R. (1984). *Language, Thought and Other Biological Categories*. MIT Press.
- Millikan, R. (1993). *White Queen Psychology and Other Essays for Alice*. MIT Press.
- Parsons, G. (2016). *The Philosophy of Design*. Polity Press.
- Preston, B. (1998). Why is a Wing Like a Spoon? A Pluralist Theory of Function. *Journal of Philosophy*, 95(5), 215–254.
- Preston, B. (2009). Philosophical Theories of Artifact Functions. In A. Meijers (Ed.), *Handbook of the Philosophy of Science. Volume 9: Philosophy of Technology and Engineering Sciences* (pp. 213–233).
- Preston, B. (2013). *A Philosophy of Material Culture: Action, Function, and Mind*. Routledge.
- Preston, Beth. (2018). Artifact. *The Stanford Encyclopedia of Philosophy* (Summer 2019 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2019/entries/artifact/>

- Sider, T. (2002). Review of Persons and Bodies: A Constitution View. *Journal of Philosophy*, 99, 45–48.
- Thomasson, A. (2003). Realism and Human Kinds. *Philosophy and Phenomenological Research*, 67(3), 580–609.
- Thomasson, A. (2007). Artifacts and Human Concepts. In E. Margolis & S. Laurence (Eds.), *The Creations of the Mind. Theories of Artifacts and Their Representation* (pp. 52–73).
- Thomasson, A. (2009). Artifacts in Metaphysics. In A. Meijers (Ed.), *Handbook of the Philosophy of Science. Volume 9: Philosophy of Technology and Engineering Sciences* (pp. 191–212).
- Thomasson, Amie. (2014). Public Artifacts, Intentions and Norms. In Pieter Vermaas et. al. (eds.), *Artifact Kinds: Ontology and the Human-Made*: 45-62.
- Vetter, B. (2015). *Potentiality: From Dispositions to Modality*. (Oxford Philosophical Monographs) Oxford, Oxford University Press.
- Vetter, Barbara. (2020). Essence, Potentiality, and Modality. *Mind*. Published 3 December 2020, URL=<https://doi.org/10.1093/mind/fzaa049>: pp. 1-28.
- Wakefield, Jerome C. (2005). Biological Function and Dysfunction. In David M. Buss (ed.), *Handbook of Evolutionary Psychology*: 878-902.
- Zimmerman, D. (2002). The Constitution of Persons by Bodies: A Critique of Lynne Rudder Baker's Theory of Material Constitution. *Philosophical Topics*, 30(1), 295–338.