

1. Introduction

The past three decades have seen a flurry of philosophical interest in the nature of artifacts – human made things like cellphones, coffee mugs, stilettos, skyscrapers, and air fryers.¹ This has resulted in a number of theories about the nature of artifacts and artifact kinds. Most philosophers assume that to be an artifact is, at least in part, to be a member of a particular artifact kind – there are no free floaters, so to speak, entities which are artifacts but don't belong to a specific artifact kind like *chair*, *gearshift*, or *lampshade*. This is borne out by our everyday interactions with artifact kinds – something is a *car* or *stylus* or *rototiller*. Pre-theoretically, when a maker makes an artifact they intend to make something that belongs to a particular artifact kind;² someone can't make a *bare* artifact.³ This raises the question of what makes a kind an *artifact* kind, in particular? Any account of artifacts that involves the following schema – call this the *artifact schema* – will be faced with this question:

Artifact Schema: x is an artifact iff x is a member of an artifact kind K and...⁴

What follows the ellipses is whatever else the account takes the essence of artifacts to involve, whether it's being intentionally created, having a particular function, structure or material, or some combination of the above.^{5,6}

¹ For a diverse selection of general work on the metaphysics of artifacts see e.g. Losonsky (1990), Hilpinen (1992), Bloom (1996), Thomasson (2003, 2009), Baker (2007), Elder (2007), Kroes (2009), Soavi (2009a), Lowe (2014), Reydon (2014), Evnine (2016), Juvshik (2021b), Irmak (2024), and the papers in Margolis and Lawrence (2007) and Franssen et al (2014). For associated discussion on artifact kind terms see e.g. Marconi (2013, 2019) and Olivero and Carrara (2021).

² For intention-dependence, see e.g. Hilpinen (1992, 1993, 2011), Dipert (1993), Bloom (1996, 1998), Thomasson (2007), Mag Uidhir (2013), Houkes and Vermaas (2014), Vega-Encabo and Lawler (2014), Evnine (2016), Xhignesse (2020a), and Juvshik (2021a).

³ Most theories of artifacts accept that there are no bare artifacts, although one may reject this assumption. While I don't have space to defend it at length here, my argument can be understood conditionally on the assumption that there are no bare artifacts or otherwise restricted to those theories that share that assumption.

⁴ This parallels Dominic McIverLopes' art schema: x is a work of art iff x is a work of K, where K is an art [kind] (2014, 16-18). Michel-Antoine Xhignesse formulates this simply as the assumption that every artwork belongs to an art kind (2020b, 471).

⁵ This includes the accounts offered by Bloom (1996), Thomasson (2003, 2007, 2014), Houkes and Vermaas (2004), Evnine (2016), Baker (2007), Elder (2007, 2014), Soavi (2009b), Franssen and Kroes (2014), and Grandy (2007). The question also arises indirectly for Hilpinen (1992) since he requires makers to intend to make something that satisfies some type-description and these descriptions seem to correspond to artifact kinds, though he doesn't explicitly say so. Dipert (1993) doesn't talk much about artifact kinds, but I suspect his account faces this question, too. Preston (2013, 2022) argues that the concept of *artifact* is explanatorily useless, and we should focus instead on *material culture*, so I'm not sure she would or should have any truck with this question.

⁶ Different theories will fill out the ellipses in different ways. This may either include further conditions on being an artifact (most often intention-dependence) or conditions on belonging to the artifact kind K (most often function or some other combination of criterial feature(s) and less often, being the result of physical modification). I will leave open how exactly the ellipses should be subsequently filled out except to note that a complete view of artifacts would require conditions on both artifactuality and conditions on being a member of the artifact kind K.

The question of what makes a kind an artifact kind is actually two questions:

- (1) What distinguishes artifact kinds from each other?
- (2) What determines the kind that any given artifact belongs to?

The first question asks what distinguishes artifact kinds from *each other*, or in other words, why does a maker make some artifact of kind K_1 rather than an artifact of kind K_2 ? The answer to this might seem obvious. After all, we know what a chair, pencil, and teapot are and rarely confuse them. Moreover, makers intend to make something of a specific kind by intending to bestow the features constitutive of the kind they intend to make. Thus, the makers' intentions seem sufficient to determine the kind in question. However, there are cases where it's not clear whether we have one artifact kind or two, e.g. in virtue of what are chairs and stools, shoes and sandals, cars and vans, mugs and bowls, distinct kinds? The second question asks what, for any given artifact, determines the artifact kind it belongs to. Again, this may seem obvious – makers intend to make something of a particular kind and if they bestow the right sorts of features on the product, then they've succeeded. However, there are cases where, for a given artifact, it's not clear which kind it belongs to, e.g. is a hotdog a sandwich or some distinct kind and is the Ford Transit a van or a car? There is substantial disagreement about such cases that isn't settled merely by appeal to the maker's intentions.⁷

A parallel question has been raised in the literature on the philosophy of art. Dominic McIver Lopes (2014) has proposed his 'buck passing' theory of art, whereby he argues that giving a theory of art is a hopeless task so we'd be better served passing the buck and giving theories of the individual arts instead. So instead of asking what general features make something an artwork, Lopes suggests that what makes something a work of art is that it belongs to a particular art kind, such as *dance*, *cinema*, or *painting*. Passing the buck in this way raises the question of what makes a kind an *art* kind. To use Lopes' (2014, 16-17) example, what makes a piece of *bizen-yaki* a work of ceramic art but my ceramic coffee mug mass produced for sale at Walmart not? Relatedly, what art kind do works like Duchamp's *Fountain* belong to if all art belongs to an art kind? An answer to the question of what makes a kind an *art* kind has recently been given by Michel-Antoine Xhignesse (2020b), who argues that it's our sometimes arbitrary and always contingent social conventions surrounding our artworld practices that

⁷ There is a nearby question about what distinguishes artifacts from other kinds, especially natural and institutional kinds, but those issues are beyond the scope of this paper. There are a number of authors who deny that there is a principled difference between artifacts and natural kinds, e.g. Baker (2007, 2008), Elder (2007, 2014), Grandy (2007), Sperber (2007), Kerr (2014), Khalidi (2016), and Güngör (forthcoming), and there has been some attempts to subsume artifacts under the scope of social ontology, e.g. Scheele (2006), Thomasson (2014), Pearce (2016), Juvshik (2023), Paek (2023), and Passinsky (2024).

determine what kinds are *art* kinds. Thus, *bizen-yaki* is an art kind because an appreciative practice surrounding *bizen-yaki* has arisen amongst our artistic practices but the same has not occurred with Walmart coffee mugs, though this is merely a result of historical circumstance, not some deep metaphysical fact.

While there are a number of important differences between the art kind case and the artifact kind case, the answer I will give to the two questions is similar to Xhignesse's.⁸ That is, what makes artifact kinds distinct kinds is that different social norms have arisen that constitute distinct social practices, but these social norms and practices are a result of contingent historical circumstance. Where there is disagreement about the kind an artifact belongs to, different parties are disagreeing about what social practice and concomitant norms the artifact *should* be subject to. I will call this the *social practice view* of artifact kinds. What distinguishes chairs from stools or shoes from boots or mugs from bowls is that there are distinct social practices governing each. What makes a hot dog a sandwich is whether hot dogs have (or have not) become subject to our sandwich practices. The social practice view of artifact kinds offers a unified account of artifacts and artworks, something that has so far proven elusive, while also illustrating the distinctly social, normative, and contingent socio-historical nature of our artifact kinds.

The paper is structured as follows. In section 2 I introduce problem cases motivating both questions while comparing them with their artworld counterparts. In section 3 I canvas the literature on norms and conventions to get a handle on their nature. Section 4 illustrates how norms arise which constitute a social practice governing a specific artifact kind by considering the historical case of *chopines*, a form of footwear popular in fifteenth century Europe. Section 5 fleshes out the social practice view while showing how it can answer the problem of distinguishing between artifact kinds. Section 6 then shows how the social practice view can answer the problem of determining what kind any given artifact belongs to by focusing primarily on the case of jaffa cakes, a British chocolate-covered confection, and the debate about whether they are cakes or biscuits. In section 7, I make a general observation about artifacts, namely that they're instances of what Ian Hacking calls *interactive kinds*, before briefly concluding in section 8.⁹

⁸ In addressing the question of what makes a kind an artifact kind, I'm not endorsing a view of artifacts parallel to Lopes' view of artworks. While Lopes thinks that a theory of *art* must pass the buck to a theory of *the arts* because no informative theory of art can be given, I think we can offer a general and informative account of artifacts.

⁹ The metaphysical approach taken in the present paper is descriptive – I aim to describe our actual social practices and norms governing artifact kinds. As will become clear, there may be first-order disagreement amongst participants of the social practices about whether something belongs to one kind or another, but any putative revision to our practices is not a result of the philosophical theory, but the interactive nature of the practices themselves.

Before proceeding, I'll note an important assumption I make. I will assume the cluster account of artifact kinds as what to fill in after the ellipses in the Artifact Schema. The cluster view takes artifact kinds to be constituted by a cluster of kind-relevant features which may be more or less central, such as function, material, form or structure, aesthetic properties, production method, and even historic or geographic features. The alternative view is function essentialism, the idea that artifact kinds are united by a function that all and only members of the kind share.¹⁰ The social practice view is compatible with both accounts, but as will become clear below, the cluster account is in a better explanatory position.

2. What Makes a Kind an *Artifact* Kind?

What distinguishes artifact kinds from each other? The criterial features which constitute each artifact kind seem sufficient to distinguish them from one another, at least in most cases. However, there are some cases where it's not so obvious what distinguishes between artifact kinds, e.g. why are *chairs* and *stools* different artifact kinds when they have such similar features and is a hot dog a sandwich or some other kind?

This question is parallel to the question in the philosophy of art which arises for buck-passing theories of art. Lopes' buck-passing theory of art states that the prospects for giving conditions for being art seem hopeless, and instead we should understand art as belonging to a particular art kind. As a result, the buck gets passed to theories of *the arts* rather than a theory of *art*. One salient question for a buck-passing theory is what makes a kind an *art* kind, specifically? Like the question I'm addressing, there are two component questions here: what distinguishes art kinds and what makes a particular artwork a member of one kind rather than another. With respect to the first question, Lopes (2014) argues it can't just be the medium used, since garages and cars are painted as much as canvass is, and a mass-produced Walmart coffee mug is ceramic just as much as a piece of *bizen yaki*. Lopes (2014, 17) calls this the 'Coffee Mug objection'. With respect to the second question, there are some artworks that don't seem to fit into our familiar art kinds, like Barry's *Inert Gas: Helium* or Cage's *4'33"*, but any theory of art that analyzes being art as belonging to an art kind can't allow such artworks. Lopes (ibid., 18) calls this the "Free Agent objection".¹¹ Lopes argues that ultimately the answer needs

¹⁰ For the cluster account, see Hilpinen (1992) and Thomasson (2007) and Gaut (2000) for the art version. For various discussions and defenses of function essentialism, see Kornblith (1980, 2007), Dipert (1993), Elder (2007), Baker (2007), Hughes (2009), Preston (2009), Evnine (2016), Olivero (2019), and Juvshik (2021c).

¹¹ Lopes (2014, 16-18) calls these two objections the "Viability Challenge" to his buck-passing theory of art. Lopes (ibid., 18-22) also argues that any theory of art, including his buck-passing theory must be *informative*. A similar challenge can be

to be sought in our artistic practices, which are distinctly *appreciative* practices, with one corresponding to each art kind, e.g. our appreciative practices surrounding *dance*, *sculpture*, and *ceramic art* (Lopes 2014, ch. 8). However, this isn't so much of an answer as it is a promissory note. Thus, Xhignesse (2020b) offers a fuller account of this buck-passing. His answer, which is structurally parallel to my own for the artifact question, is that what makes a kind an art kind are the social conventions that govern the associated artistic practices.

The question of what makes a kind an *artifact* kind arises for any theory of artifacts that assumes that being an artifact entails belonging to an artifact kind. I called this the Artifact Schema:

Artifact Schema: x is an artifact iff x is a member of an artifact kind K and...

We need to say what distinguishes artifact kinds from each other and in virtue of what are particular artifacts members of those kinds rather than others. As a result, structurally similar problems to the Coffee Mug and Free Agent objections arise for artifacts.

There are important differences between the art kind question and the artifact kind question. Most obviously is the centrality of *medium* for art kinds compared to the centrality of *function* for artifact kinds, generally. Generally, the most important feature constitutive of an art kind like *painting* is the medium used to produce the work, such as paint on a canvas. By contrast, most artifact kinds such as *pencil* are more centrally determined by possession of a particular function, namely being for writing or drawing. I take all artworks to be artifacts, but artworks nonetheless exhibit certain features that make them idiosyncratic artifacts.¹²

It's generally easy to distinguish between different kinds of artifacts. If I go to the store intending to buy a microwave, I know to go to the electronics section, and once in the appropriate aisle I can readily identify the things that are microwaves. A simple explanation of what's going on is that I'm aware of what the constitutive features of microwaves are and what the constitutive features of most other kinds are that I might encounter when shopping for a microwave. For example, I know video games come in small disc form, while microwaves are around two feet wide.¹³ I know that TVs have a large display screen in the front which is the means of executing their primary function, while microwaves are for heating food, with a little front door and buttons typically to the right of the door

raised against any theory of artifacts, generally. However, I don't consider this objection since it's beyond the scope of this paper and most accounts of artifacts on offer do seem to be genuinely informative.

¹² But I wouldn't go so far as saying artworks are *sui generis* artifacts, as Levinson (2007) does. For the relation between artworks and other artifacts see Eaton (1969), Iseminger (1973), Davies (1991), Hick (2019), and Terrone (forthcoming). Following Hilpinen (1992) and Evnine (2016), I also assume there can be artifactual events, such as performances.

¹³ Or at least, such descriptions of the form or structure of the artifact are constitutive of its kind.

allowing the user to adjust the settings. Knowing all of these features makes it easy to distinguish microwaves from other kinds of artifacts.¹⁴

But things aren't always so clear-cut. There's very little overlap in the constitutive features of microwaves and video games, while there's more overlap between microwaves and TVs, and still more between microwaves and toaster ovens. Yet in some cases the overlap of constitutive features is so significant that the kinds are almost indistinguishable. Consider the case of chairs and stools. Their respective constitutive features are almost identical:

Chairs: *Intended for seating a single person, made of wood, metal, plastic, fabric, has a flat seat, often supported by four legs, has armrests and a back, used in a wide variety of settings, etc.*

Stools: *Intended for seating a single person, made of wood, metal, plastic, fabric, has a flat seat, often supported by three or four legs, sometimes has armrests and a back, typically used in more informal settings, etc.*

Some of these features, such as having four legs, armrests and a back, are far more central for chairs than stools.¹⁵ Nonetheless, some chairs lack them (recliners, bean bag chairs, and curule chairs,¹⁶ respectively), while others are had by some stools (bar stools may have all three).¹⁷

A common bar stool greatly resembles most standard kinds of chairs, even more so than some chairs do, such as bean bag chairs. For any given constitutive feature that bar stools have, a chair can be found that shares that feature. That is, we can't look at a particular stool and say it's a stool *because* it only has three legs, since we can find chairs which only have three legs. Similar considerations hold

¹⁴ Usually there's a sign saying 'microwaves' and the boxes or display tags will say 'microwave' on them. These sorts of linguistic markers are often necessary when encountering artifacts of a familiar kind but which have new or different features than typical exemplars.

¹⁵ These features are all more or less central and makers have latitude to prioritize some over others. For example, a maker could make something that is structurally similar to a standard chair but that is unable to support the weight of a person, thereby failing to meet the functional criterial feature of chairs, yet having satisfied the structural feature. Thus, such a thing would still count as a chair, albeit an idiosyncratic one. There may be borderline cases where it's not clear if the maker met some sufficient threshold of criterial features for the thing to count as a member of its kind.

¹⁶ Curule chairs usually involve two U-shaped pieces of metal, wood or plastic, with the U's attached at the bottom with their sides functioning as legs and armrests, respectively, and typically no back. They also often were designed to fold and were popular during Ancient Rome.

¹⁷ Here it becomes clear why function essentialism about artifacts can't help since chairs and stools have (roughly) the same function. Some authors specify the function in a very narrow way to avoid conflating chairs and stools (and other similar cases), usually by tying function to a specific material structure. However, this individuates artifact kinds so narrowly that they aren't our familiar kinds like chair and stool but highly specific kinds like the *Eames 1957 desk chair*. See Baker (2007), Elder (2007, 2014) and Soavi (2009b) for this approach.

for the other features.¹⁸ We can't merely appeal to the maker's intention and claim that S's intention to make a *stool* shows that S's creation x is a stool rather than a chair because we have to understand S's intention to make a stool as S having an intention to bestow stool-relevant features on x.¹⁹ But then we're back to the widely shared constitutive features of stools and chairs. S's intention to bestow features k_1, k_2, k_3 , etc. on her creation could be indistinguishable from an intention to make a chair. Even if S only has the (*de dicto*) intention to bestow features k_1, k_2, k_3 , etc., her resulting creation will belong to either the kind *chair* or *stool* (with perhaps some indeterminacy at the outset if there's disagreement).²⁰

This problem is a more general version of Lopes' Coffee Mug objection, the main difference being that the medium in the original art case plays a marginal role in the more general artifact case. Chairs and stools aren't centrally constituted by a particular material(s), but by their function – being for seating a single individual. Nonetheless, both chairs and stools share this feature, just as coffee mugs and *bizen yaki* are both ceramic. Thus, the most central features of each are insufficient for distinguishing between them.²¹ This problem generalizes to all artifact kinds where there's heavy overlap in the clusters of constitutive features, e.g. mugs and bowls, pens and pencils, sandals, shoes, and boots, etc.

In many cases it doesn't really matter whether something is a stool or a chair. But in some cases it matters a great deal what kind a given artifact belongs to, as in the two cases below:

Jaffa Cakes: A jaffa cake is a British confection consisting in a circular sponge base topped with orange jam with the top (including the entirety of the jam) covered in chocolate. Is this confection a cake or a biscuit (cookie)? If it's a cookie, then it'll be subject to an additional tax on chocolate covered cookies, but not if it's a cake. A number of features are appealed to in support of both: it's called a 'cake', the base is made of a typical cake ingredient (sponge), and when they go stale they become hard like cakes rather than soft like many biscuits/cookies. On the other hand, they are cookie-sized, are packaged like cookies, are placed in the cookie aisle in stores, and are eaten by hand, without a fork, whereas

¹⁸ I am assuming that stools aren't a subkind of chair since we generally treat them as distinct artifact kinds, in particular, distinct kinds of *furniture*, just as we do with sofas, ottomans, benches, and footrests. The difficulties of distinguishing between chairs and stools arise equally well with stools and footrests and chairs and ottomans, benches, or sofas.

¹⁹ See Hilpinen (1992), Thomasson (2007), and Juvshik (2021a) for discussion of the intention-dependence condition.

²⁰ For some artifact kinds, it could belong to both, depending on its features, i.e. we could say this thing you made is both a pallet knife and a spatula. However, I suspect that such hybrid artifacts generally evolve into their own distinct kinds over time, as seems to have happened with *spork*.

²¹ Some non-art artifact kinds may also be centrally distinguished by material, such as sparkling wine or Peking duck.

eating cakes usually involve utensils. Due to the additional taxation, this issue went to the UK High Court (Edmonds 2017).²²

Ford Transit: Ford's smallest van is the Transit, which is manufactured in Spain for export to the U.S. However, the U.S. imposes a 25% tariff on the import of vans and light trucks. To get around this tax, Ford builds the Transit with rear seats and windows in Spain, only to remove them once they arrive in the U.S., thereby claiming they are cars (subject to a 2.5% tariff) when entering the American market. This has led U.S. Customs and Border Protection to file suit against Ford (Chan 2018).

In both cases, whether the artifacts in question are cakes or cookies, vans or cars, has very important practical consequences, namely, how the items should be taxed. Yet in both cases, appealing to the constitutive features of the kind is insufficient for distinguishing them for the same reasons given regarding chairs and stools. Nor are these isolated cases. The practice that Ford engages in, known as 'tariff engineering' (Chan 2018) is quite common. Other examples include Nike's subsidiary Converse, which attaches strips of felt to the bottom of footwear so they can be imported as slippers rather than shoes, and a long-standing dispute about candles imported to the US from China where shaped wax is imported without a wick and thereby classified as 'unmoulded wax' only to have the wicks added once they're in the U.S., thereby avoiding a candle tax (*ibid.*).²³

The case of jaffa cakes and the Ford Transit are the general artifact parallels to Lopes' Free Agent objection. In the art case, the problem is that there appear to be some artworks, such as Barry's *Inert Gas: Helium*, where the artist released a measurable quantity of helium into the air at a location near Los Angeles, that don't fit into our familiar art kinds. It's not a painting, nor is it a sculpture or poem. But, assuming that to be an artwork is to belong to an art kind, it must belong to *some* art kind, even though none of our familiar art kinds seem appropriate. Given the Artifact Schema, jaffa cakes need to belong to *some* artifact kind, and the most plausible candidates are *cake* or *cookie*, but there's disagreement about which one. The case of tariff engineering is slightly different since it involves some

²² Some may doubt that foodstuffs are artifacts. I'm assuming they are since they parallel typical artifact creation, e.g. creating a chair from Ikea instructions is quite similar to making a cake by following a recipe. However, there are many non-food examples that illustrate the same point, so I'm not hanging the case on foodstuffs. For example, the same point can be made about whether Marvel Comics' X-Men figures were dolls or action figures. US tariff law treated them as different kinds and taxed them differently, with the main distinction being that dolls are human-like while action figures are not. Like jaffa cakes, this went to court to settle the dispute, with Marvel arguing successfully that their toys were not human and thus should be subject to the lower tax rate for action figures. Yet this distinction in kind has generated a number of gendered norms governing such toys. See Yglesias (2011).

²³ Another recent case occurred in Ireland where the courts ruled that Subway's rolls were not bread because they contained too much sugar. Notice that this distinct socio-legal practice governs what counts as bread *in Ireland* and not elsewhere. Thus, artifacts may count as a particular kind in one jurisdiction but not in another. See <https://www.bbc.com/news/business-54370056>.

post facto modification. Nonetheless, the question still arises as to whether the vehicles imported into the U.S. are cars or vans since Ford intends to sell them as vans and the allegedly car-relevant features are removed upon arrival, but both cars and vans may have rear seats and windows.

The problem here is normative. We have a socio-legal practice of taxing different kinds differently: cakes are taxed one way, while (chocolate covered) cookies are taxed another. This suggests that social norms play a pivotal role in determining kindhood and kind membership. The question then is what *norms* and thus what *social practice*, should jaffa cakes and the Ford Transit be subject to, that of cakes or cookies and vans or cars, respectively? In what follows, I'll develop an account of the norms and concomitant social practices governing our artifact kinds which will yield responses to the artifact versions of the Coffee Mug and Free Agent objections. However, first we need a clearer idea of what social norms are.

3. Norms and Conventions

The terms ‘norm’ and ‘convention’ are often used interchangeably in quotidian contexts, while philosophical use of these terms is more technical.²⁴ Some philosophers think only norms, but not conventions, are normative, while others think that conventions are principally for facilitating coordination while norms are for holding us accountable to one another (Southwood and Eriksson 2011, 196). Some philosophers, such as David Lewis (1969, 99) think that all conventions entail norms, while others, such as Ullmann-Margalit (1977) and Verbeek (2002) take all norms to entail conventions. I won’t take a stand on these issues here. My concern is getting clearer on what social norms are so as to explain the role they play in our artifact kind practices.²⁵

Conventions are, following Lewis’ (1969) classic account, taken to be solutions to coordination problems. A coordination problem is a situation where two or more agents must coordinate their actions, where an agent’s choice of action depends on the choice of actions of other agents (Lewis 1969, 8ff.). For example, if we want to meet up for a drink, then where I go depends on where you will go and vice versa and we succeed if we both go to the same place. This is a state of *equilibrium* – no agent would have been better off had they acted otherwise unless another agent’s behaviour was different (*ibid.*). For Lewis, conventions are agents’ continuously employed solutions to coordination

²⁴ For interdisciplinary discussion of social norms see the papers in Hechter and Opp (2001).

²⁵ The next several paragraphs largely follow Xhignesse’s (2020b, 476-481) discussion.

problems.²⁶ Conventions, understood in the Lewisian sense, aren't helpful in distinguishing artifact kinds since these don't (always) involve coordination problems. Distinguishing between chairs and stools isn't a coordination problem, at least not on its own.²⁷

Two other accounts that are more fruitful are Ruth Millikan's (1984) account of natural conventions and Cristina Bicchieri's (2006) account of social norms. On Millikan's account, conventions are behavioural patterns reproduced in virtue of precedent. Some pattern of behaviour is reproduced from an earlier pattern of behaviour if the new pattern is counterfactually dependent on the previous one – if the earlier pattern had been different in any relevant functional respects, so too would the later pattern differ (1984, 19-20).²⁸ Millikan's account doesn't require any sophisticated conceptual or doxastic apparatus; agents proliferate conventions simply because they are copying previous behavioural patterns – theirs or someone else's – and so learn from past experience. Particular conventions may arise for a variety of reasons, including evolutionary selection, ease or accessibility, or for completely arbitrary reasons (*ibid.*, 23-24).²⁹

Bicchieri (2006, 8ff.) offers an account of social norms whereby norms develop through rational reproduction (i.e. imitation) of others' behaviour and expectations of others' behaviour.³⁰ Norms are perceived as involving two kinds of expectations: empirical and normative (*ibid.* 11-15). On the empirical side, individuals believe that all or most or some sufficiently large subset of the group or population conforms to norm N in situations of type S. On the normative side, individuals believe that all, most or some sufficiently large subset of the group or population *expects* them to conform to norm N in situations of type S (or additionally they prefer them to conform and will sanction them if they don't). Thus, social norms proliferate by individuals expecting everyone else to conform to the norm and expecting everyone else to expect them to conform to the norm, so the individual thereby imitates the behaviour of others that they take to be norm-conforming (in the appropriate context), often for fear of being rebuked.

²⁶ In general, coordination problems can be solved by appealing to *salience* – some equilibrium stands out for some reason as especially good for all involved – or to *precedent* – one equilibrium state was reached the last time or on multiple previous times (Lewis 1969, 35-36).

²⁷ For an alternative account of conventions, see Gilbert (1989, 2015) and for a comparison between her view and Lewis' see her (2008). Gilbert adopts a more holistic picture of how conventions arise and proliferate than Lewis' individualistic approach.

²⁸ To be a convention on Millikan's account, the behaviours must be reproduced due to precedent involving counterfactual-dependence, otherwise they are merely accidental regularities.

²⁹ Millikan (1984, 24) gives the example of the convention of shaking hands with our right hands. This is 'natural' since most humans are right handed but for left handed individuals it is merely copied behaviour – copied *because* other individuals widely engage in that behaviour.

³⁰ While Bicchieri doesn't think that all social norms entail or lead to conventions (understood as coordination problems), she does argue that social norms transform situations of conflict into coordination problems (2006, 26).

Millikan's and Bicchieri's account are substantially similar. The main difference is that Bicchieri's account makes explicit room for sanction, rebuke, or punishment via her normative condition, which is a key aspect of social norms, especially as they pertain to artifacts. By contrast, Millikan's natural conventions are just counterfactually dependent copied behaviours, but this doesn't really explain why violators are often socially sanctioned.³¹ I won't commit myself to either Millikan's or Bicchieri's accounts, though I prefer Bicchieri's because it explicitly recognizes that norms³² are patterns of imitated behaviour in particular contexts, violations of which can lead to social sanction.^{33,34}

We now have a general idea of what social norms are. Examples include kissing on the cheek to greet someone in France and Switzerland, raising your hand to vote in meetings, wearing a tie (for men) in certain social-professional contexts, standing during national anthems, applauding to signal praise, picking up after your dog in public spaces, and so on. All of these are informal rules that we are expected to adhere to and expect others to adhere to. They largely perpetuate due to precedent: we follow them, often with little conscious thought, simply because that's what others have done in the past, such as with waving as a form of greeting.³⁵ Norms may be formalized in legal rulings, so that a failure to adhere to the norm will often entail formal sanction. When norms are formalized, it's usually because they are less arbitrary and enforcing norm compliance is important for social functioning, such as picking up after your dog, though the vast majority of social norms, such as 'don't stare at strangers' are informal.³⁶ When a critical mass of people eschew a norm and continuously do so over time, the norm changes.³⁷ Social norms are not immutable, but can be fleeting or can become entrenched through the weight of precedent.³⁸

³¹ Another important difference is that for Millikan the copying mechanism need not be rational, but can result from other factors (e.g. genetic factors) and thus it doesn't necessarily involve *imitation* (Millikan 1984, 10-12).

³² Xhignesse (2020b, 480) talks of conventions but is also fine with talking of norms. Again, technical differences in terminology don't much matter here since we're getting at the same general phenomenon.

³³ Xhignesse (2020b, 480-481) seems to prefer Millikan's account of natural conventions, but doesn't recognize the difficulty of accounting for social sanction, while simultaneously remarking that Millikan's and Bicchieri's accounts are quite similar.

³⁴ Bicchieri reserves the term 'norm' for *informal* rules like shaking hands with the right hand, while excluding *formal* rules like legal rulings (2006, 8). The latter are supported by formal sanctions while the former are not – you won't be fined for shaking hands with your left hand, though you may be corrected. I will also reserve 'norm' for these informal rules.

³⁵ Indeed, greetings are culturally variable and also vary depending on whether it's a stranger or an acquaintance.

³⁶ This example is Bicchieri's (2006, 8).

³⁷ To use Xhignesse's (2020b, 481) example, a pervasive norm in the United States during the twentieth century was that a bride would adopt her husband's surname, while this practice is uncommon or explicitly barred in some jurisdictions (Quebec, Spain, South Korea).

³⁸ Norms may come and go, such as whether male facial hair is fashionable; this seems to flip flop from generation to generation, with facial hair currently being in vogue.

Social norms also govern our interactions with artifacts. Such norms prescribe what features are kind-relevant, how members of the kind are to be used, how they are to be treated and regarded, and by whom and in what contexts.³⁹ For example, the norm ‘single seating with back support is normally a chair’ prescribes a certain feature that is central to being a chair. This norm can be violated or ignored, as with curule chairs or stools that have backs. Artifact kinds have associated constitutive norms which determine the kind-relevant features and say, roughly, that “things with features k_1 , k_2 , or k_3 are normally members of the kind K ”. Sometimes violating such constitutive norms carries little to no sanction, as is the case with chairs that have no backs while sometimes they carry very strong rebuke, such as a trainee pastry chef who cuts in rather than folds the butter while making puff pastry – a technique used for making rough puff or flaky pastry. These norms also govern how artifact kinds should be treated. Fine China is accorded a certain amount of respect and care that mass produced ceramic mugs from Walmart are not, with the former being regarded as dainty, beautiful, and valuable while the latter is regarded as cheap and expendable. Such norms dictate in what contexts and by whom members of particular artifact kinds are to be used. One shouldn’t bring fine China to a picnic.

Social norms also govern artifact function and use. The norm governing the use of chairs is that they are for seating a single individual, but there’s also a norm about how this function should be executed – straddling a chair with the back between your legs is considered too informal for many situations.⁴⁰ There’s a well-entrenched norm about what flathead screwdrivers are for (attaching screws with the appropriate corresponding slot) but there’s also a widespread norm that flathead screwdrivers are ideal for opening paint cans, even though this wasn’t their intended function.⁴¹ Nonetheless, this *accidental* function of flathead screwdrivers is so common that you probably wouldn’t be sanctioned if you used a flathead screwdriver in this way. However, sometimes such uses are *misuses*. Using fine China as a doorstop will likely be sanctioned for non-arbitrary reasons: it’s likely to break.⁴²

Artifact norms are no less mutable than other social norms. During the pandemic the use of masks was expected in most social settings, with individuals open to very strong rebuke if they failed to appropriately use them. Home exercise equipment was originally developed in order to allow users

³⁹ See Thomasson (2014) for discussion of these artifact norms.

⁴⁰ A chair that can’t effectively seat a single individual, perhaps because the seat is broken, is a *malfuctioning* chair. By contrast, a chair that can seat someone but very uncomfortably is a *bad chair*. See Franssen (2006) for discussion of such functional norms.

⁴¹ Millikan (1984, 1, 28; 1995) also makes these points, though in the context of her account of proper functions, as well as in her account of natural conventions. See also Evnine (2022) for discussion of use and counter-use.

⁴² Other artifact norms are more arbitrary – that white flags are used to surrender isn’t due to any particular feature of white flags that makes them especially good for such a task, it’s simply tradition. This is what Searle (1995) calls a status function since the performance of the function is independent of the material properties of the artifact.

to exercise at home, yet it increasingly became used to signify a certain status or lifestyle, but with the onset of the COVID-19 pandemic, it was again used for its original function.⁴³ While function and use can change, so can the appropriate audience and context. Dangly earrings were usually only worn by women but are increasingly worn by men and while sparkling wine was often reserved for celebratory occasions, it's now regularly consumed in general social gatherings. Artifact norms are perpetuated via precedent and give rise to social practices which govern artifact kinds. To see how this occurs, it will be helpful to consider in detail a concrete, historical case before attempting to answer our initial question about artifact kinds.

4. A Historical Example: The Case of Chopines

Social norms, and artifact norms specifically, are well illustrated by fashion trends. Indeed, Xhignesse (2020b, 483-484) gives the example of the rise of a 'tulipworld' in Europe in the seventeenth century to illustrate how norms give rise to social practices. Wearing tulips became fashionable and the nobility sought to wear certain varieties which were in turn cultivated for their rarity and beauty and displayed in tulip catalogues. Eventually people ceased caring about the bulbs and the tulips themselves and only cared about their monetary value, resulting in a market crash. Thus, a cluster of norms arose governing tulips and these norms came to constitute an entire social practice through the accumulation of precedent which lasted from 1610 to 1637 (*ibid.* 483). I'll focus on a different historical case, though from a similar era: the rise and fall of chopines as a popular form of footwear in Europe.

Chopines, known in Italian as *pianelle* and in French and Spanish as *chapins*, were elevated shoes popular in Europe from the fifteenth to seventeenth centuries. The chopine developed from platform overshoes, such as clogs or poulaines, in Venice in the fifteenth century which had themselves been imported to Europe from the "Orient".⁴⁴ Chopines became fashionable aristocratic dress during the height of the Renaissance. Overshoes and chopines were similar in height with the highest extant chopine measuring fifty-two centimeters, though more modest ones were around nine to fifteen centimeters. Clogs were predominantly worn by the poor and were usually made of wood since it was cheap, abundant, and durable. By contrast, chopines were mostly worn by nobles and were made from more expensive, less durable, but much lighter cork and signified wealth and social status (Muzzarelli 2006, 53-54). However, there were two important differences between clogs and chopines. Chopines

⁴³ See Elder (2014, 35) for discussion of this and other examples.

⁴⁴ They may also have originated in Spain since many of the platforms were made from cork and Spain was the primary source of cork during the fifteenth century (Semmelhack 2008, 8).

were explicitly not overshoes, but were a single piece of footwear with the elevated platform to be worn directly on the feet, while overshoes were designed for daily shoes, slippers or stockings to be slipped inside and thereby protected from the muddy streets. Secondly, while elevated overshoes like clogs were unisex, chopines were exclusively worn by women with generally higher elevation and ostentatious décor, being covered in silks and embroidery.⁴⁵

Because chopines were elevated platforms and often very high, they were very impractical footwear. Even with lighter cork platforms they were very difficult to walk in and balance often required the help of a noble woman's attendants. In addition to showcasing their wearer's wealth, they also came to be associated with female sexuality, making women appear taller and showing bits of ankle. The chopine eventually became associated with Venetian prostitutes who wore far more elevated versions, giving it an erotic association (Semmelhack 2008, 12). This sexual dimension of the chopine raised the ire of the Church since it was viewed as an affront to God and showed its wearer's lack of humility and chastity. This led to regulation of the chopine by both Church decree and government laws, known as sumptuary laws, which dictated what features of chopines were allowed (Muzzarelli 2006, 54-56). While the Church had moral concerns, legislators were more concerned about the danger to women's health if they fell and the cost of materials required both to decorate chopines and the greater length needed for skirts to cover them. This included bans on using silk and gold or silver embroidery and the Venetian Major Council of 1430 even decreed that chopines were not to be higher than nine centimeters, although this was widely ignored (Semmelhack 2008, 12; Ford 2021, 235). Fines were levied against both the wearer and the cobbler who violated these prescriptions. However, these sumptuary laws frequently changed, suggesting that there was major pushback against these restrictions (Muzzarelli 2006, 59-61). Indeed, the Church proposed banning chopines altogether, but many noblemen objected because the extreme height of the shoes and their concomitant lack of functionality allowed them to easily control the movements of their wives (Vianello 2006, 92-93).

While the chopine was popular throughout Europe well into the seventeenth century, it was gradually superseded by the introduction of the much smaller heeled shoe which gained popularity in Paris, after originating in the Middle East where heeled shoes were common in cavalry units for their utility in keeping the foot in the stirrup (Ford 2021, 235-236). Unlike the chopine, heels were, like previous elevated overshoes, unisex, thereby retaining the height afforded by the chopine but without its gendered associations. The main difference between chopines and heels, besides the former being

⁴⁵ Though Vianello (2006, 81) suggests that chopines were very early on worn by men but this quickly changed as they became associated with female sexuality.

explicitly gendered, was that heels were only partially elevated, with the elevation occurring only under the heel, setting the foot at an incline. Chopines, by contrast, had a platform that went the length of the foot (Semmelhack 2008, 14). *High* heels were increasingly popular, again being used to denote status, as well as to enhance the female form, in part by making the foot appear dainty, an ideal which gained prominence with the publication of Perrault's *Cinderella* in 1695 (*ibid.*, 21).⁴⁶ By the end of the seventeenth century and certainly by the eighteenth, the chopine had ceased to be fashionable.⁴⁷

From its introduction, the chopine gave rise to, and was subsequently subject to, a variety of social norms which in turn came to constitute an entire social practice surrounding this form of footwear. The chopine was deemed a new, distinct kind of shoe from previous elevated overshoes, like clogs, though there's nothing necessary about this distinction. Indeed, there was no medieval distinction between hosiery and footwear; shoemakers made both and stockings were viewed as a type of shoe (Muzzarelli 2006, 57). Rather, the most distinctive feature of chopines was their gendered status. Relatedly, chopines were viewed as status symbols – the higher and more lavish the shoe, the richer and more important the wearer. Of course, the elevation of chopines, in conjunction with their gendered status, led to their association with prostitution and female sexuality. To wear an extremely high chopine was to be regarded as deliberately sexualized. With the transition to the unisex heel, this erotic norm persisted. However, the gendered status of chopines was likely the cause (in conjunction with the difference in structure) of their distinction from heels. Men couldn't be associated with female dress, so heels were regarded as a distinct kind of footwear from chopines and were thereby subject to different norms. Unsurprisingly, these norms differed for heels that were expressly for men or women (Semmelhack 2008, 21ff.).

Social norms governed all facets of our practices surrounding chopines and were often supported by formal rules about how such footwear should be made. Thus, these norms came to structure the market, regulating both the constitutive features of chopines, including height, materials, decoration, and their function and use – they were intended to be public footwear, they weren't worn around the home. Moreover, they were expressly for women of noble status or who were prostitutes and as a result, a noblewoman could make quite a statement with the choice of higher chopines, which allowed for a form of female self-expression in a rigidly patriarchal society (Vianello 2006, 93). Thus, we can see that a particular kind of artifact, popular for a couple of centuries, gave rise to a set of

⁴⁶ Red bottoms originated in the court of Louis XIV, King of France, with only nobles being allowed to wear red heels to signify that they had been granted royal favour, thereby walking on the 'red carpet' of the court (Semmelhack 2008, 21-22).

⁴⁷ For extensive discussion of the history of footwear, see the papers in Riello and McNeil (2006).

social norms that governed its creation, use, and treatment. These norms governed what features were central to the kind, who could wear them and in what contexts, and how they differed from other similar artifact kinds such as clogs and high heels. Moreover, these norms were not immutable, as they changed alongside changes in the associated social practice, and disappeared with the fall from fashion of the chopine. There was nothing necessary or essential to their rise – they just happened to be the norms that arose around chopines – but they distinguished the chopine from other kinds of footwear. Nonetheless, as a purely descriptive historical fact about our social practices in early modern Europe, these were the norms that governed chopines.

5. Artifacts and Social Practices

We've seen how social norms arise and come to govern artifact kinds in the case of chopines. These norms give rise to a *social practice* surrounding the artifact kind. Such norms govern how a kind should be created, used, treated, regarded, appreciated, maintained, repaired, reused, appropriated, recycled, and by whom and in what context. These norms are perpetuated through precedent and new individuals are introduced to the social practices by following the norms that constitute them.

Whether we focus on kinds or social practices doesn't really matter, though in general talk of artifact kinds is more common. The point is that there is a cluster of ways to interact with a particular kind of artifact which are normative – *this* is how we use and treat this sort of thing in these contexts. In general, function/use will be central to any social practice surrounding an artifact kind, though this isn't always the case. While chopines are principally footwear and are thus to be worn on the feet, they are also to be used by women, when going out in public, as a way of displaying their sexuality, and if they are too high, they would be scandalous for an aristocratic woman and are only to be worn by prostitutes. This is how makers and users interacted with and treated chopines, and how others viewed and treated them. By contrast, for some kinds, especially art kinds, *appreciation* and *regard* are more central. Appreciating a painting, for example, involves not touching it (as opposed to most other artifact kinds), displaying it in particular lighting, and standing a certain ideal distance from it to fully grasp its affect, as well as having knowledge of its provenance and the constitutive features of the kind *painting* and its subkinds such as *Impressionist painting*.⁴⁸

⁴⁸ See Lopes (2014, 130-133) and Xhignesse (2020b, 482-484) for discussion, both of whom emphasize that artkinds are crucially *appreciative* kinds. Lopes at least takes this to include function, a notion which he borrows from Thomson's work on normative kinds (2008, 19ff.).

For each artifact kind, there is a distinct social practice governing it.⁴⁹ In some cases, these social practices may be very similar and involve extensive overlap in their constitutive norms. Think of mittens and gloves, which have the same function and are primarily distinguished by their structure, with the former being more commonly worn by children.⁵⁰ However, in most cases the associated social practices are very different. We treat pacemakers and notepads, lampshades and fan belts, in completely different ways. In making an artifact of a particular kind, a maker may explicitly intend to make something that belongs to or is intended to be governed by, a particular social practice. However, this need not be the case. In some instances, a maker may just intend to bestow certain kind-relevant features, but if she is in a certain social context, her creation will be subject to the social norms governing the kind. The social context of creation is thus very important. A maker may intend to make a wallet, say, and thereby intend it to be used to carry identification and bank cards, cash, and pictures, but if her making is socially situated, the wallet will be treated as wallets are normally treated in that context.⁵¹ This includes their function, care (leather wallets or expensive brand name wallets require more care than others), general treatment (it's generally unacceptable to touch and rifle through a stranger's wallet unless you are returning it to them), and regard (they are generally treated as a mini private space of their owners and are thereby accorded a particular respect that such privacy normally demands).⁵²

Makers, users, and others who interact with members of an artifact kind have precedential reasons to adhere to the social practices governing that kind since they are *normative* – if they don't then they are open to sanction or rebuke for not following the social norms and thus not properly participating in the practice. In some cases, these norms are negative or prohibitive, such as *not* reusing face masks or plastic straws or *not* using a laptop as an umbrella.⁵³ But it's worth emphasizing that such

⁴⁹ An exception may be two distinct cultures with no contact that independently develop the same artifact kinds because the social practices that arise are (basically) the same. However, whether two cultures produce the same artifact kinds may itself be decided by the social practice of the assessor culture, i.e. whether the participants of that practice take the other social practice to be (sufficiently) similar.

⁵⁰ Another example may be sporks and spoons and forks. The social practices are very similar, but the primary difference may be their context of use, i.e. sporks aren't to be used in formal dinner settings.

⁵¹ See Juvshik (2023) for discussion of private versus social contexts of creation.

⁵² In general, it seems that the social practice into which the maker intended their creation to be inducted or subject to is the one that takes precedent. Moving an artifact from one social practice to another doesn't seem to change its kind, though it may come to fall under a further, distinct kind. The Irish ruling that Subway's sandwich rolls aren't bread only holds for rolls made by Subway in Ireland. But interestingly, almost everyone in Ireland or elsewhere will still regard those rolls as bread and they will be counted as bread if they are brought to another jurisdiction. In other cases, we may just say that an artifact belongs to multiple kinds, as with Thomasson's (2014, 54 and n9) example of chopsticks made in China that are exclusively used as hair ornaments in the US.

⁵³ See Saito (2007, Ch. 5) for discussion of such judgements in everyday contexts.

practices can and do change – they are the result of contingent and often arbitrary historical circumstances and their norms are reinforced by precedent.⁵⁴

We can now give an answer to the first problem we started with, the general artifact analogue of Lopes' Coffee Mug objection: why are chairs and stools distinct kinds when they have the same function and general shape? We can appeal to our social practices to address the general artifact version of this question.

Chairs and stools are distinct artifact kinds because we have developed different norms, and concomitantly different social practices, that govern these kinds. Thus, while the centrality of various kind-relevant features often plays an important role in distinguishing artifact kinds, the more important factor is that distinct kinds are subject to distinct social norms and thus are involved in different social practices.⁵⁵ In the case of stools, the norm governing stool use generally says that they are used for more informal occasions; they aren't used at the dinner table, living room, or as primary seating, except in certain situations, such as at a bar or when there are insufficient chairs. Chairs are more varied but are more often used in formal settings than stools and for longer periods of time since they typically have back and arm support, making them more comfortable. Even though *this* stool is for seating a single individual and *this* armchair is also for seating a single individual, they're distinct kinds despite their shared function (parallel to the *bizen yaki* and Walmart mug both being *ceramic*) or any other shared features because they are subject to different social practices and norms. This could have been otherwise if our social practices had developed differently. Given the heavy overlap in their kind-relevant features, this isn't difficult to imagine. Perhaps our practices could have developed such that thrones were a distinct kind from chairs, rather than a subkind. Similarly, the chopines practice could have developed such that they were the same kind as clogs or high heels. The norms that did arise were the result of contingent socio-historical circumstance.

As Xhignesse (2020b, 486-487) remarks, the question of what makes a kind an art kind can be asked either *synchronously* or *diachronically* and the same can be said for artifact kinds, generally. If we ask why chairs and stools are distinct kinds despite having the same function, we can answer *synchronously* by looking to our actual practices. We currently have distinct social practices around chairs and stools, so they are distinct kinds. Of course, chairs and stools are very similar kinds precisely

⁵⁴ Social practices may die out, either because people stop adhering to their norms or because they become amalgamated with another social practice. This convergence of practices would effectively eliminate an artifact kind. Conversely, a social practice may also diverge into two distinct social practices, thereby creating a new artifact kind.

⁵⁵ Note that the centrality of different kind-relevant features between chairs and stools is itself a result of different norms governing the two kinds.

because our social practices governing chairs and stools are so similar. The same holds for kinds like cakes and cookies, vans and cars, hammers and gavels, kilts and skirts, cushions and pillows, laptops and tablets. On the other hand, bowls and bracelets are radically dissimilar kinds because our current associated practices for each kind are so different.

By contrast, if we ask why chairs and stools are distinct kinds despite having the same function, we can also answer *diachronically* by looking at the history of the kind and the associated social practices. In the case of chairs and stools, this is quite difficult to do since they are such old artifact kinds, probably developing along with the first settled communities. However, we have extensive documentation of the history of shoes, including chopines: we have ample evidence from both paintings and records of sumptuary laws, as well as numerous samples. We can answer quite unequivocally why chopines are a distinct kind from clogs and heels by appeal to their respective social practices. For any artifact kind, our diachronic answer will be as informative as the evidence we have for the kind's origins. In many cases, our artifact kinds developed over thousands of years so their origins are mysterious.⁵⁶ Nonetheless, we can point to particular historical developments that differentiated between kinds. We have far better historical information for more recent inventions, like the telephone, radio, or airplane (cf. Xhignesse 2020b, 486-487). In many of these cases what distinguishes between kinds is the very different sets of kind-relevant features constituting the kinds which are determined by a constitutive norm. So why are laptops and tablets different kinds? Primarily on the basis of the manner in which they perform their intended function: tablets are hand-held devices while laptops rest on a flat surface. With the extremely quick pace of technological development, it's not inconceivable that these two devices evolve into a single artifact kind, just as we are seeing fusions of watches and phones and phones and computers, parallel to the Medieval lack of a distinction between hosiery and footwear (Muzzarelli 2006, 57). Our artifact norms and practices determine our artifact kinds and just like all social norms and practices, they are contingent historical developments which can either become entrenched or change.

6. What Determines an Artifact's Kind?

Lopes' Free Agent objection is that there can't be any artworks which don't belong to an art kind. Yet certain hard cases, such as Felix Gonzalez-Torres' "Untitled" (*Portrait of Ross in LA*) which is a pile of candy in a museum that museum-goers are intended to eat or, to use Xhignesse's example, Tracey

⁵⁶ See Xhignesse (2020b, 483) for similar remarks about art kinds.

Emin's *Everyone I Have Ever Slept With 1963-1995*, which is a tent with the names of all the people the artist literally slept with in that time period applied to it, don't fit well into any established art kinds. A version of the Free Agent objection arises for artifacts, generally, as we saw with the case of jaffa cakes and the Ford Transit. In such cases, the question is what determines a particular artifact's kind? We can now appeal to the social practice view to address the general artifact version of the Free Agent objection.

Interestingly, the free agent objection is less pressing for a theory of artifacts. An artifact will belong to myriad nested artifact kinds,⁵⁷ so it's easy to identify some at least very general artifact kind that any particular artifact belongs to such as 'utensil' or 'furniture'.⁵⁸ In the art case the artworld is more reticent to posit a new art kind when confronted with a putative free agent like Cage's 4'33". Instead, we try to subsume it under the social practice of some pre-existing art kind like music, even though it doesn't fit well there. It's only after many such alleged free agents give rise to a new social practice and concomitant art kind, such as *conceptual art* or *installation art*, that such works come to be so classified (Xhignesse 2020b, 487-488).⁵⁹

In the general artifact case, there are two ways we can approach prototypes and new artifact kinds. First, we can recognize that we often seem willing to simply posit a new artifact kind when confronted with a prototype that's different from pre-existing artifacts. A new kind, the *telephone*, was invented with its first member because no other communication device functioned in a similar manner. A new kind and thus a new social practice, however small and constrained it initially was, arose. Often function, or the particular way an artifact performs some function, is sufficient to institute a new artifact kind. Using gears to move the hands on a face to track the time differentiates one kind of timepiece, analogue clocks, from other timepieces such as water clocks, digital watches, and atomic clocks. On this understanding of new artifact kinds, we would have an important *dissimilarity* between the art kind and artifact kind cases, most likely due to the particular norms governing our artistic

⁵⁷ Some artifacts will belong to multiple artifacts kinds which aren't 'nested'. For example, a Swiss army knife is simultaneously a *knife*, a *fork*, *scissors*, etc. It may also be deemed a multifunctional tool. The same holds for laptops, which are communication devices, writing implements, calculators, and many other things.

⁵⁸ Here one may object that it's possible to make a 'bare' artifact by appeal to Robinson Crusoe cases, i.e. Crusoe is alone on an island and makes some new kind of thing unlike any existing artifact kind, which would be a bare artifact or a prototype that doesn't have a social practice. Here we can say that if Crusoe was stranded and thus came from some culture, then he either he would subsume his creation under some existing kind, however poor the fit, or he may intend it to be treated and used in a certain by other agents (even if this is understood hypothetically) so he establishes some basic norms in reference to others. Alternatively, we can follow Dipert (1993, 23ff), Thomasson (2014, 54-56), and Juvshik (2023, 13-14) and distinguish between tools or private instruments on one hand and public artifacts on the other, in which case Crusoe is only making the former.

⁵⁹ See Dodd (2018) for discussion of 4'33" as conceptual art.

practices (Xhignesse 2020b, 482-487). Our interests in non-art artifacts are usually practical and are thus often governed by functional norms. Our artistic practices tend to change far more slowly – artistic norms and artistic practices are often very deeply entrenched and resistant to innovation.⁶⁰ Second, we could understand new artifact kinds along the lines of Lopes and Xhignesse, whereby they are initially subsumed under an existing social practice, even if it isn't a good fit, until a distinct social practice arises and a new artifact kind is recognized. In fact, this may be what happened with the telephone since Alexander Graham Bell intended it to be a hearing aid for the deaf. This would make the parallel between the art and artifact cases even stronger. I won't commit myself to one view or the other, as I suspect both may hold for different historical cases.⁶¹

We saw that the Free Agent objection for artifacts still arises, albeit in a different guise. Sometimes our norms and practices don't fully settle whether a given artifact belongs to one kind or another. This typically occurs with artifact kinds that have significant overlap in their kind-relevant features.⁶² This is what happened with the jaffa cake: jaffa cakes are both cake-like and cookie-like in various ways, but our practices are such that it's unsettled whether they're one or the other. Basically, in such a situation, our practices haven't developed sufficiently yet to account for such a kind because up until now they haven't had to. Jaffa cakes were produced and consumed before the question of their cakey-ness or cookie-ness had to be settled. Note that the question needs to be settled (often by institutional formalization of existing norms) because practical, interpersonal, consequences depend on the answer. In the case of jaffa cakes, it's how to tax them. Because the norms of creation, use and treatment for cookies and cakes are so similar, it didn't really matter whether a jaffa cake was a cake or a cookie. Consumers treated them in a particular way (which seemed more cookie-like) and others copied this practice, *de facto* subsuming jaffa cakes under our social practice governing cookies via the accumulation of precedent. However, some aspects of our practices surrounding cakes and cookies – in this case, the levy of taxes – are sufficiently different that it must be *de jure* determined whether they belong to one kind or the other.

The question of whether jaffa cakes are cakes or cookies isn't an *empirical* question that can be answered simply by observing sample jaffa cakes. The preponderance of their constitutive features

⁶⁰ At least when it comes to the introduction of new art kinds. In another sense, our artistic practices are far more varied and flexible than other artifact kind practices since the artworld is far more open to accepting a particular entity as an *artwork*.

⁶¹ The first view may have the unintuitive consequence that a single individual (the creator) can constitute a social practice as a limiting case. This may suggest the second view is more plausible.

⁶² It's unlikely to occur between, say, a skyscraper and a belt buckle.

will not yield an answer to which kind they belong – they have some cake-like features and some cookie-like features.⁶³ While their features are certainly relevant to answering the question, what's really going on is cooperative decision making about which social practice to subsume jaffa cakes under. In cases like this, where the disagreement is entrenched, often a legal decision is required to settle the dispute in a way that binds the participants. Thus, the courts play an important role, through formal legal rulings, on *deciding* or *stipulating* which artifact kind jaffa cakes belong to. Interestingly, the jaffa cake ruling found them to be cakes, yet the British public continue to treat them as they do cookies (biscuits).⁶⁴ So while the legal ruling helped the producers of jaffa cakes avoid a chocolate covered cookie tax, it doesn't place any sanction on how consumers treat them.⁶⁵ Another way of understanding the question of whether jaffa cakes are cakes or cookies is as a case of metalinguistic negotiation (cf. Plunkett 2015). That is, parties to the debate are not disagreeing about the nature of the kind *cake* and *cookie* but about how we should use the terms “cake” and “cookie”. The question is about whether the term “cake” or “cookie” should be used to refer to jaffa cakes, so the debate isn't about the world *per se* but about how we use our artifact kind terms or their associated concepts. But whatever the outcome of the formal litigation of the debate, it is both *contingent* and *prescriptive* through collective decision-making.⁶⁶

In the case of the Ford Transit, U.S. Customs and Border Protection filed suit against Ford for willfully avoiding the import tax on vans and light trucks. Despite Ford's insistence that the vehicles are cars, it's clear to all interested parties that they're vans and are produced as such. This isn't because of the constitutive features of vans but because Ford clearly has the intention of treating them and selling them as vans. But it may take an official court ruling to fully determine the case.

A similar case occurred in a mall food court in Worcester, Massachusetts, where there was a clause in the tenant contract that only one restaurant of each kind could occupy space in the food court. A sandwich shop sued when a Mexican restaurant moved in, arguing that burritos are sandwiches. However, the court ruled that burritos aren't sandwiches by appeal to the alleged “common sense” definition, “two thin pieces of bread, usually buttered, with a thin layer (as of meat,

⁶³ Although this is in fact what the adjudicator did. See <http://www.timcrane.com/jaffa-cakes.html>

⁶⁴ In cases where the *de jure* ruling differs from our *de facto* practices (as in the case of jaffa cakes), we may want to describe the ruling as erroneous. While it is prescriptive and the courts have legal authority to make such a prescription, if they ignore or fail to understand the relevant social practice, it may make sense to say that their judgement was incorrect.

⁶⁵ One of the considerations cited was that “cake” appeared in the name, though as we know from Kripke's (1980, 26) example of the Holy Roman Empire, it doesn't follow that jaffa cakes are cakes.

⁶⁶ For discussion of the nature, evidence, and varieties of metalinguistic negotiation see Belleri (2020) and Plunkett and Sundell (2013, 2023).

cheese, or savory mixture) spread between them” (Florestal 2008, 2). In this case, the court seemed to side with how people *de facto* treated burritos and sandwiches, with the legal ruling again having little impact on our burrito practices beyond the particular case.

In other cases, our social practices provide *de facto* answers – through the accumulation of precedent – sufficient for our practical purposes. This has happened with whether hot dogs are sandwiches. The introduction of the hot dog as a kind of street food is ultimately the introduction of a new prototype artifact.⁶⁷ In prototype cases, new norms and practices arise over time which in turn decide whether the kind is actually just a variation on an old artifact kind or if it constitutes a new artifact kind. The norms governing hot dogs and sandwiches are so similar that for most practical purposes it doesn’t matter whether hot dogs are a distinct kind or a subkind of sandwich. Our practices may also shift over time on their own. For example, The American National Hot Dog and Sausage Council ruled in 2015 that hot dogs weren’t sandwiches. However, this institution doesn’t have legal authority to make this determination legally binding – this would likely lie with the US Food and Drug Administration – but such a ruling seems to agree with most people’s intuitions and thereby further supports the *de facto* status of the hot dog as distinct from sandwiches.⁶⁸

So how can we answer the Free Agent objection for artifacts, generally? The same way we distinguish between artifact kinds, by appeal to our social practices and the social norms that constitute them, which through the weight of precedent, determine whether an artifact belongs to one kind or another. Sometimes due to practical, interpersonal disagreements, a formal, institutional ruling on which kind an artifact belongs to is needed, though this *de jure* decision may have limited impact on our *de facto* artifact practices. There are no “deep” metaphysical facts here; we don’t need to uncover the fundamental building blocks of the universe to answer these questions. We just need to look to our social practices which govern our artifact kinds.⁶⁹

7. Artifact Kinds as Interactive Kinds

I now want to make a general observation about artifact kinds which will help unify artworks with other artifacts. Artifact kinds are what Ian Hacking (1988, 2000) has called *interactive kinds*. Interactive

⁶⁷ The sausages originally used were German Frankfurters but coupling them with a bun or roll was an American invention, thought to have originated in the late 1800s in either the Midwest or at Coney Island. Of course, as with many foods, their history is highly debated. See the National Hot Dog and Sausage Council for the history of hot dogs: <http://www.hot-dog.org/culture/hot-dog-history>.

⁶⁸ See Deutsch (2015) <https://www.usatoday.com/story/news/nation-now/2015/11/07/a-hot-dog-is-not-a-sandwich/75362898/>.

⁶⁹ See also Xhignesse (2020b, 486), who makes a similar pronouncement about artworks.

kinds are kinds which change by their application and which in turn change those things that they're applied to. Hacking's examples are all of social kinds such *child abuse* and *multiple personality*. The things falling under these kinds are affected by that very categorization and in turn the things that fall under the kind affect the categorization itself. Hacking (1995) calls this a *feedback loop* or *looping effect*. By being categorized as having multiple personality, those patients come to identify with the category, which further distinguishes them from other people, often acquiring new properties, but these new properties in turn come to be associated with multiple personality, and the relevant experts subsequently modify the concept of multiple personality or their theoretical beliefs about it. Through successive applications of the concept, the kind itself was taken to have new properties in virtue of the new properties instantiated by its members.⁷⁰

Normally, the looping effect occurs between classifier and classified, but it can also involve those who interact with the classified or reject or accept the classifier. This is the case for artifacts, since they aren't themselves agents. Instead, artifact kinds (the classifier) are applied to various entities (the classified) and both are interacted with by various agents. Consider the steps of the looping effect for an artifact kind:

- (1) A maker makes an artifact of a novel kind K with K-relevant features $k_1 \dots k_n$, which heralds the introduction of a new artifact kind and associated concept K.
- (2) Ks are accepted by the relevant K-audience and additional makers begin making Ks, copying the features $k_1 \dots k_n$, but also adding additional features $k_o \dots k_t$.
- (3) The kind K is applied to these artifacts and production becomes more widespread.
- (4) Ks become further distinguished from other, similar artifact kinds K^* based on their properties, and acquire new constitutive features $k_o \dots k_t$ that are bestowed in subsequent production or are identified or otherwise bestowed by users, consumers, sellers, reviewers, and others who interact with the kind.
- (5) The kind K comes to be associated with these new features $k_o \dots k_t$ which leads makers (and users, sellers, producers, etc.) to modify their concept of Ks or their beliefs associated with the kind K.
- (6) The constitutive features of Ks thereby come to include $k_o \dots k_t$ in addition to or instead of features $k_1 \dots k_n$.

⁷⁰ See Khalidi (2010, 337-338) on the differences between the looping effects of multiple personality and child abuse, as well as the nature of interactive kinds, generally.

The kinds are often subject to change as they evolve and develop through various socio-historical pressures and processes. The looping effect occurs between the various agents who interact with the artifact kind and its members. This most often includes makers/designers and users, but also buyers and sellers, product reviewers, and legislators.⁷¹ The features constitutive of the kind, as well as the other norms governing the kind, determine who should use such artifacts and in what manner, but are in turn changed by the individuals that use those kinds of artifacts.

The social practice view applies to art kinds as much artifact kinds, as Xhignesse has argued. What counts as *art*, and specific art kinds like *music* and *painting*, has been changing over the past couple thousand years in the same way that footwear has. Duchamp's ready-mades initially met resistance from the artworld but over time they were accepted as art and ready-mades became a new art kind with associated social norms and practices. The application of the concept of *art* to Duchamp's ready-mades changed them but they in turn changed the concept, expanding what counted as art.⁷² Sometimes the revised concept may meet resistance or be taken up, thereby establishing dual (and dueling) precedents. These sorts of social pressures are constantly exerted on artifact kinds, leading to innovation within the kind and the introduction of new kinds and the entrenchment of extant ones.⁷³ Putting the point another way, the individuals that follow social norms and practices (or *don't* follow them) in turn change the social norms and practices, with new individuals participating in these changed practices and in turn changing them. The *social* dimension of artworks and artifacts is precisely what makes them *interactive*.⁷⁴

8. Conclusion

Assuming that all artifacts belong to an artifact kind, we are faced with the question of what makes a kind an *artifact* kind? This is actually two questions, parallel to Lopes' Coffee Mug and Free Agent objections for theories of art. I argued that the answer is the same in both cases, parallel with

⁷¹ Product reviewers are an interesting parallel with art critics in their role as evaluators of the artifact kind.

⁷² See Evnine (2013) for discussion of Duchamp's cases.

⁷³ Understanding artifact kinds as interactive kinds is consonant with both Weitz's (1953) idea of art as an 'open concept' and Thomasson's (2003) distinction between 'strict' and 'loose' artifact kinds.

⁷⁴ Hacking argues that *only* social kinds are interactive kinds because the targets of the natural sciences are stationary, while the targets of the social sciences are always 'on the move' (Hacking 2000, 108). However, Khalidi (2010) argues that some *natural* kinds are interactive as well. Xhignesse (2020b, 484) claims that *all* social kinds are determined by convention and therefore all social kinds are interactive kinds. I'm not sure Xhignesse is right here because Khalidi (2015, 99-101) identifies some social kinds, such as *recession* and *racism* which only depend on the existence of some social group, not any specific attitudes that group has towards the kind or its members. It's not clear if these kinds are interactive because they don't seem subject to conventions or norms. Perhaps we could say such kinds can be interactive if the group has the associated concept.

Xhignesse's answer for artworks: our social practices and the norms constituting them distinguish artifact kinds and also determine, either through the accrual of precedent or through stipulation, what kind any particular artifact belongs to. These social practices ultimately rely on various norms which govern the artifact kind – norms of creation, use, regard, and treatment – which we saw with the historical case of chopines and the debate surrounding jaffa cakes. The social practices governing artifact kinds simultaneously give rise to feedback loops – the social practice changes as agents either follow or violate its norms.

This *social practice view* of artifact kinds answers an unasked question in the artifact literature, but one that must be addressed given the widely held assumption that all artifacts belong to an artifact kind. This simultaneously offers a unified theory of artworks and other artifacts since they are both determined by their respective social practices, the main difference being that artworks are most centrally constituted by a *medium* while for other artifacts *function* tends to be more important. The social practice view shows that there are no deep metaphysical facts to discover about our familiar artifact kinds – they are the result of contingent socio-historical circumstances. The social practice view incorporates the main features of artifacts that have dominated the literature. First was an overemphasis on the notion of function, then a focus on the intentions of makers, and most recently Thomasson's (2014) move to public norms.⁷⁵ While my hope is that this moves the literature towards a greater focus on the social nature of artifacts and artifact kinds, it does leave open the nature of social practices themselves.⁷⁶ But this question, along with the problem of distinguishing between artifacts and natural and institutional kinds, is work for future research. For now it's enough to recognize that what makes a kind an artifact kind is its associated social practice and the norms constituting it.

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⁷⁵ For function approaches see e.g. Dipert (1993), Baker (2007), Elder (2007), and Kornblith (2007) and for intentionalist approaches see e.g. Hilpinen (1992), Bloom (1996), and Thomasson (2003). Thomasson's turn to public norms is inspired by the work of Ingarden (1989). There's arguably a fourth condition, namely physical modification, but it is discussed far less; see e.g. Dipert (1993), Baker (2007), Koslicki (2018, ch. 8), Goodman (2020), and Juvshik (2021b) for discussion.

⁷⁶ For a book-length attempt at understanding social practices, see Tuomela (2002).

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