Instrument terms, bare singulars, and event kinds

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1 Introduction

The definite determiner in English is, of course, not normally semantically vacuous. Yet in a class of sentences that contain singular instrument terms, exactly that seems to be the case. There doesn't seem to be any obvious truth-conditional difference between the two forms in (1):

(1) Floyd plays $\left\{\begin{matrix}\text{piano}\\ \text{the piano}\end{matrix}\right\}$.

A contrast between the two forms emerges, however, in the presence of adjectival modification:

(2) Floyd plays $\left\{\begin{matrix}\text{excellent piano}\\ \#\text{the excellent piano}\end{matrix}\right\}$. *(on kind reading of* piano*)*

The bare form allows an adverbial reading of the adjective (in the sense of Stump (1985) and others), yielding a meaning approximately like 'Floyd plays piano excellently'. The modified definite form lacks this interpretation of *excellent*. More surprising still, it also eliminates the kind interpretation of *piano* and must be about a particular piano rather than the kind, meaning only something like 'Floyd plays the particular piano that was excellent'.

The aim of this paper is to account for this contrast between bare and definite instrument terms as well as their distributional and interpretive differences more generally. We will propose that bare instrument terms denote EVENT KINDS. This makes possible two varieties of modification that would otherwise not be available: adjectives with adverbial readings, like *excellent* in (2), and adjectives associated with subkinds of playing events rather than subkinds of instruments. Crucial to our analysis will be distinguishing a form of *play* that occurs with definites from the *play* that occurs with bare nouns. The former, more canonical form combines with its object conventionally. The latter form is a light verb on which *play* combines with an event description of a performance.

Section 2 presents novel data regarding the distributional and interpretive differences between bare and definite instrument terms, focusing on their kind-denoting properties, their occurrence with *play*, and the types of modifiers they allow. Section 3 discusses prior research on kinds, weak definites and bare singulars, and nonlocal modifiers—including adjectives with adverbial interpretations—and their relation to event kinds. Section 4 presents an event kind analysis of bare instrument terms and elaborates how this interacts with the light verb *play* to yield the observed

pattern of facts. Section 5 provides a broader view, considering some possible extensions of the analysis.

2 The facts

Both bare and definite instrument terms can denote kinds. This is evidenced by their compatibility with kind-level predicates, such as *emerged* and *widespread*:

(3) a. {Piano / The piano} emerged in the 18th century.

b. {Piano / The piano} is widespread in this town.

This kind interpretation remains in *play* constructions. Both the definite and bare form of *piano* can occur as objects of *play* without referring to a particular piano, as in (4):

(4) The students played {piano / the piano} last night.

Crucially, (4) is true under a reading in which each student played a different piano.

It is unsurprising, given previous research, that *the piano* can denote a kind. Definite descriptions can in general be kind denoting, irrespective of whether they involve musical instruments (Chierchia 1998; Dayal 2004):

(5) **The** {camera / automobile} emerged in the 18th century.

The uses of instrument terms in *play* constructions more closely resemble weak definites (Schwarz 2009; Aguilar Guevara & Zwarts 2011), which are definite descriptions that lack the usual presupposition of the existence of a unique identifiable individual:

(6) Voters across the country sent off their ballots at **the** {post office / library}.

Aguilar Guevara & Zwarts (2011) propose that weak definites also refer to kinds, so these facts both ultimately point to a kind-referring analysis of at least some instrument terms. However, bare singulars are not generally assumed to be able to denote kinds, so the kind interpretation of bare *piano* in (3) and (4) is already puzzling.

While both bare and definite instrument terms have kind interpretations, their readings under different types of modification reveal subtle differences between them. In general, kind expressions tend to have more restricted modification possibilities, but notably can be modified by adjectives that specify a subkind. For example, *electric guitar* is a subkind of guitar, as it is its own distinguished type of instrument. That contrasts with other modified forms of *guitar* such as *small*

guitar or *red guitar*—neither of these is normally understood as a subkind of the kind GUITAR. Therefore, unsurprisingly, *guitar* can maintain its kind interpretation when it undergoes modification by *electric*, because of course, electric guitar is a widely known and generally superior form of guitar. A similar case is *bass trumpet* in (7), which again references a subkind of trumpet:

(7) a. (The) {electric guitar / bass trumpet} emerged in the 20th century.

b. Clyde plays (the) {electric guitar / bass trumpet}.

Interestingly, though, there is a difference between bare instrument terms and their definite counterparts with respect to kind reference. Only bare instrument terms support a reading involving a subkind of *music* rather than a subkind of instrument. For example, *country* is a style of music, not a kind of instrument. There exists no distinguished well-established country guitar instrument kind. So *country guitar* has a kind reading referring to the guitar playing associated with country music, but it does not have a reading involving a (non-existent) instrument, a country kind of guitar. *Jazz trumpet* is similar, in that it too is a style of trumpet playing but not a kind of trumpet, and this behaves similarly. Both are impossible with the definite determiner:[1]

(8) a. #The {country guitar / jazz trumpet} emerged in the 20th century.

b. #Clyde plays the {country guitar / jazz trumpet}.

Without one, both are possible, and crucially, about styles of music-playing:

(9) a. Clyde plays {country guitar / jazz trumpet}.

b. {Country guitar / Jazz trumpet} emerged in the 20th century.

These subkind modification facts suggest more generally that bare instrument terms denote kinds of playing events while their definite description counterparts denote kinds of physical instruments.

Though more subtle, this contrast also exists without modification given the appropriate context. For example, if, in a post-apocalyptic society, archaeologists rediscovered physical guitars as artefacts, but did not know how to play them or indeed what they were used for at all, this discovery can be described with the definite description but not with the bare nominal:

[1] An alternative perspective is that *the country guitar* in (8) coerces *country guitar* to be interpreted as a kind of instrument. It conveys that there exists a kind of physical instrument called a 'country guitar'. This still falls in line with the observation that kind-denoting definite instrument terms only modifiers that denote a subkind of the instrument.

(10) $\left\{ \begin{array}{l} \text{The guitar} \\ \text{\#Guitar} \end{array} \right\}$ reemerged in 2050 and puzzled everyone.

In the definite case, it is the physical instrument that reemerged. In the bare case, it would have to be guitar playing.

This difference also has consequences for co-occurrence with adjectives that characterize quality such as *excellent*. Such modifiers typically prevent kind reference in definite descriptions, as these adjectives don't identify subkinds. Thus, predictably, such modifiers eliminate the kind reading of definite instrument terms:

(11) #Floyd plays the $\left\{ \begin{array}{l} \text{good} \\ \text{bad} \\ \text{excellent} \\ \text{lousy} \end{array} \right\}$ piano. *(on kind reading of* piano*)*

This, however, changes with bare instrument terms, which do allow quality-characterizing modification and kind reference to co-occur. Furthermore, these modifiers, again, describe the *playing* of an instrument as opposed to the physical instrument itself. Thus (12a) can be paraphrased as (12b):

(12) a. Floyd plays good piano.
b. Floyd plays piano well.

Here is a table that summarizes the types of modifiers bare and definite instrument terms allow on a kind reading:

(13)

	type of modification		
	individual subkind (*electric guitar*)	event subkind (*country guitar*)	evaluative (*good guitar*)
bare	Yes	Yes	Yes
definite	Yes	No	No

Both definite and bare instrument terms can be kind-denoting and both forms allow modifiers that denote a subkind of the instrument. Bare instrument terms are however more promiscuous—they additionally allow modification involving a subkind of music playing (e.g. *country* or *jazz*) and quality (e.g. *good* or *bad*).

3 Analytical tools

3.1 Event kinds

To lay the groundwork for our analysis, we need to articulate two general analytical assumptions. The first of these is an ontological one about how the domain of kinds and the domain of events are related.

In classical discussions of kinds such as Carlson (1977) and Chierchia (1998), kinds are viewed as cousins to non-kind (object) individuals. For Carlson, it is simply a sortal distinction. For Chierchia, there is a bit more that must be said, but kinds are still constructed, ultimately, out of object individuals. That might be taken to suggest that kinds and individuals are inextricably linked. But that doesn't seem to be the case, metaphysically or linguistically. A priori, if particular individuals can be realizations of kinds, there is no reason to assume that particular events can't also be realizations of kinds of events. Indeed, Chierchia's conceptualization of the issue would seem to actually predict that there should be event kinds. For him, kinds are essentially pluralities of possible individuals, so that the kind **RABBITKIND** is ultimately the plurality of rabbits across possible worlds. If kinds are such pluralities, it is expected that there should also be event kinds, because it is possible to construct pluralities of possible events. Thus the event kind **PIANO-PLAYING-KIND** is the plurality of all possible events of playing a piano across possible worlds.

In this respect, the existence of event kinds is at least the null hypothesis, and arguably perhaps actually a prediction of standard theoretical assumptions. But an increasing amount of empirical evidence has also accumulated that there are kinds in the event domain. Gehrke (2019) provides a general review, but one early argument in this direction (Landman & Morzycki 2003) comes from anaphors with both adnominal and adverbial uses, which are anaphoric, in their adnominal use, to kinds, and in their adverbial use, to manners, which can be construed as event kinds. Another empirical argument for event kinds comes from adjectival participles in German (Gehrke 2015).

What is especially relevant for current purposes, though, is that event kinds have independently arisen in the empirical neighborhood we're currently exploring. Schwarz (2014) relies on them in work on the aforementioned weak definite descriptions, which definite descriptions of instrument names clearly resemble. Another connection is in how adjectives behave with instrument terms. As discussed in 2, these often get adverbial readings—playing excellent piano is playing piano excellently. The classic example of an adjective with adverbial readings is *occasional* and its close relatives—an occasional sailor sails occasionally, and if an occasional sailor strolled by, a sailor strolled by occasionally. Gehrke & McNally (2015) argue that this surprising adjective-adverb correspondence should also be understood ultimately as a consequence between manner and event kinds.

For our purposes here, the crucial component is just that there is a solid independent basis to assume that event kinds exist, and even to assume that they are relevant to the analysis of the particular data we seek to explain here.

3.2 Derived Kind Predication and composition with instrument terms

The other major analytical assumption we need to put into place involves how kinds are composed, both in general and in cases like *play the piano* specifically.

Grammatically, it is normally possible to combine a kind-denoting expression with a predicate that expects to combine with an ordinary object rather than a kind. As a matter of logic, though, that's unexpected, and an additional assumption is necessary to knit these pieces together. The standard one is a type shift, Chierchia (1998)'s Derived Kind Predication (DKP). A typical way to express it is by sup-

posing that an instance of applying an a predicate of objects P to a kind k should be construed as an existential claim: that P holds of an object that realizes k. This much is standard.

For our purposes, though, we will need to generalize the usual formulation of Derived Kind Predication slightly to accommodate event kinds. It will be crucial here that the object that realizes the relevant kind can be either an individual or an event. To reflect this, our statement of Derived Kind Predication uses the variable o, which we take to range over both individuals and events that are objects rather than kinds. Correspondingly, k ranges over both individuals and events that are kinds. Beyond that, everything will be standard, including the use of the shifting operator $^{\cup}$, which maps a kind to the property of realizing the kind:

(14) **Derived Kind Predication** (Crosscategorial Variant)
$P(k) = \exists o[^{\cup}k(o) \wedge P(o)]$ where k is a kind, o an object, and P a property

Thus, when the object-level predicate **arrive** combines with the kind **RABBITKIND**, it amounts to saying that there was a rabbit realization that arrived:

(15) $\textbf{arrive}(\textbf{RABBITKIND}) = \exists x[^{\cup}\textbf{RABBITKIND}(x) \wedge \textbf{arrive}(x)]$

That's because $^{\cup}$**RABBITKIND** is simply the property of being a rabbit.

We will follow Aguilar Guevara & Zwarts (2011) in assuming that ordinary *play* takes an object as its argument, and that it too can combine with a kind-denoting expression via Derived Kind Predication. They observe that this is sufficient to provide a semantics for cases where ordinary *play* combines with definite descriptions of instruments. That's reflected in (16), which further assumes with them that the direct object is introduced via the neo-Davidsonian thematic-role predicate **theme** (it also uses a superscript o to flag that x^o is a variable over objects rather than kinds):

(16) a. $[\![\textit{the piano}]\!] = \textbf{PIANO-KIND}$
b. $[\![\textit{play}_{\textit{object}}]\!] = \lambda x^o \lambda e \,.\, \textbf{play}(e) \wedge \textbf{theme}(e, x^o)$
c. $[\![\textit{play}_{\textit{object}}\ \textit{the piano}]\!] = [\![\textit{play}_{\textit{object}}]\!]\,([\![\textit{the piano}]\!])$
$= \lambda e \,.\, \exists x^o[^{\cup}[\![\textit{the piano}]\!]\,(x^o) \wedge [\![\textit{play}_{\textit{object}}]\!]\,(x^o)(e)]$ (by DKP)
$= \lambda e \,.\, \exists x^o[^{\cup}\textbf{PIANO-KIND}(x^o) \wedge \textbf{play}(e) \wedge \textbf{theme}(e, x^o)]$

This helps explain the definite description portion of the instrument term facts. But what about bare instrument terms?

4 Analysis

4.1 Bare singular instrument terms

A natural move, especially given the Aguilar Guevara & Zwarts (2011) insight into definite description instrument terms, is to suppose that bare cases like *play piano* are very similar. Indeed, one might even suppose that *play piano* is just an elided

form of *play the piano*. But taking quite so literal-minded an approach is not available to us because of the differences already noted in 2 between definite and bare instrument terms. If *play piano* were an elided form of *play the piano*, we would expect precisely the same modification possibilities in these cases—yet as we have seen, *play excellent piano* does not mean the same thing as *play the excellent piano*. For the same reason, it wouldn't suffice to suppose that bare *piano* means precisely what *the piano* means: that they both refer to **PIANO-KIND**. Again, this would fail to explain the difference.

A relatively conservative step forward is to suppose that bare *piano* differs from *the piano* in that it refers to a slightly different kind. Where *the piano* refers to a kind of instrument, *piano* refers to a kind of *music*. One might even imagine implementing this syntactically as a variety of ellipsis as well, eliding the word *music*. This is not quite the path we will take, but it will be a helpful intermediate hypothesis.

It's progress. It would explain why bare instrument terms can accept subkind modifiers that involve subkinds of music rather than subkinds of instrument. As noted before, *country guitar* is a style of playing guitar, but not a subkind of guitar. If bare instrument terms—unlike their definite counterparts—refer to kinds of music, it would follow that *play country guitar* is possible, because it is essentially 'play country guitar music', but that *#play the country guitar* is not, because it isn't about a subkind of music. Rather, it is about subkinds of instruments, 'play instruments that realize the country guitar instrument kind', which does not exist.

Better still, assuming bare instrument terms refer to music kinds would explain the evaluative modification facts. *Play excellent guitar* is possible because it is essentially 'play excellent guitar music'. On the other hand, *play the excellent guitar* is not possible on a kind reading, because it is essentially 'play instruments that realize the excellent guitar kind'. Here there is a slight bump in the road. Aren't excellent guitars a kind? It is, after all, possible to refer to such a kind with bare plurals:

(17) Until recently, all guitars were mediocre. Excellent guitars emerged only in the last few decades.

But definite descriptions of kinds aren't just like any other form of kind reference. To refer to a kind with a definite description, it is necessary not just that the kind exist, but that it be well established (Carlson (1977), Dayal (2004), among others). The classic example, attributed by Carlson (1977) to Barbara Partee, involves kinds of bottles:

(18) The $\left\{ \begin{array}{c} \text{Coke} \\ \text{\#green} \end{array} \right\}$ bottle has a long neck.

Green bottles may be a kind of bottle, but they are not a well established kind of bottle. How to spell this out precisely is of course an interesting issue, but not immediately crucial. What's crucial for us is just that this independently predicts that the definite description *the excellent guitar* could only refer to a kind if it was well established, and excellent guitars are not a well established subkind of guitar.

Another advantage of the hypothesis that bare instrument terms refer to kinds of music is that it would explain why they—surprisingly—behave like mass terms. They occur with quantity expressions like *too much*, which is only possible with mass terms:

(19) a. Floyd ate too much $\left\{\begin{array}{l}\text{cheese}\\ \text{*sandwiches}\end{array}\right\}$.

b. Floyd played too much $\left\{\begin{array}{l}\text{piano}\\ \text{*pianos}\\ \text{*the piano}\end{array}\right\}$.

Kinds bear a fundamental conceptual resemblance to masses (Chierchia 1998; Dayal 2004), so its a satisfying connection to make.

It is here, however, that the kind-of-music approach begins to go wrong. *Music* can be individuated with classifier-like expressions such as *piece* or *arrangement*, but that isn't the case for bare instrument terms:

(20) Floyd played $\left\{\begin{array}{l}\text{a piece}\\ \text{an arrangement}\end{array}\right\}$ of $\left\{\begin{array}{l}\text{piano music}\\ \text{\#piano}\end{array}\right\}$.

Such contrasts aren't just about the mass-count distinction. That's especially clear in sentences like (21). Expressions like *collection* are perfectly compatible with both masses and plurals—the mass term *piano music* and the plural *recipes* in (21)—but they too resist bare instrument terms:

(21) This book is a collection of $\left\{\begin{array}{l}\text{recipes}\\ \text{piano music}\\ \text{\#piano}\end{array}\right\}$.

Rather, the crux of the issue is that bare instrument terms refer not just to a mass kind, but a mass *event* kind: the *playing* of piano music. One reason to suspect that this is the relevant distinction is that the overtly eventive expression *piano playing* is impossible in both (20) and (21), just as bare *piano* is:

(22) a. \#Floyd played $\left\{\begin{array}{l}\text{a piece}\\ \text{an arrangement}\end{array}\right\}$ of $\left\{\begin{array}{l}\text{piano}\\ \text{piano playing}\end{array}\right\}$.

b. \#This book is a collection of $\left\{\begin{array}{l}\text{piano}\\ \text{piano playing}\end{array}\right\}$.

Piano playing can't naturally be substituted for *piano* in (19), but that's probably due to the awkwardness of repeating *play*.

4.2 Building an eventive denotation

To spell this out, we'll assume that bare instrument terms involve a null number head EVENT. Because it occupies the Num head, it doesn't co-occur with plural morphology. Its role will be to shift a property of *being* an instrument to the property of *playing* that instrument:

(23) $[\![\text{EVENT}]\!] = \lambda P_{\langle e,\, t\rangle} \,.\, {}^{\cap}[\lambda e \,.\, \exists x^{o}[e \text{ is an event of playing } x^{o} \wedge P(x^{o})]]$

But as (23) reflects, it does this in a particular way that puts kinds into the picture. That's reflected in the presence of $^{\cap}$ type shift, which shifts properties to their corresponding kinds. What EVENT does is build the property of playing some instrument, and then nominalize that property into its kind counterpart. That's a natural move because we now have ample evidence that this construction is fundamentally about kind reference. But, as we are now discovering, it's also about events, so it's fitting that it's a property of events that it nominalizes, yielding an event kind rather than an ordinary individual kind.

The effect of this is that when EVENT combines with the NP *piano*, it yields the event kind of playing a piano, namely, **PIANO-PLAYING-KIND**.

This explains why bare instrument terms are, in fact, bare. The NumP EVENT *piano* refers to a kind. Consequently, it can't combine with an overt determiner, because English determiners expect property-denoting complements, not kind-denoting ones.[2]

Another advantage of this approach is that it correctly links the possibility of an eventive reading to the absence of plural morpheme with which it competes for a structural position. Eventive readings really do seem to be restricted in this way. An eventive reading is possible for (24a), but not for the plural-marked (24b), which unambiguously describes a dangerous onstage accident involving wayward pianos:

(24) a. Piano emerged from the orchestra. *(eventive)*
b. Pianos emerged from the orchestra. *(not eventive)*
c. The piano emerged from the orchestra. *(not eventive)*
d. Drums emerged from the orchestra. *(not eventive)*

Because EVENT is incompatible with an overt determiner, (24c) is also not eventive. Perhaps, one might object, the problem is that pianos are only ever played one at a time, independently ruling on an eventive reading of *pianos*. But that's not the case for drums, which are normally played in groups, yet (24d) still robustly resists an eventive reading.

The EVENT shift may actually be a special case of more generalized shifts. Harley (2008) and Kiparsky (1997) suggest bare singulars other than just instrument terms can involve a shift to events canonically associated with the noun. This occurs, for example, in *The cow calved* or *We saddled the horse*. We will leave this connection unexplored here because making it more fully would entail explaining what blocks, for example, *sandwich* from being shifted into the kinds of eating of sandwiches.

4.3 Subkind and adverbial adjectives

This makes the correct predictions with respect to modification. Because the kind is an event kind, it can accept event kind modifiers, so *country guitar* can refer to a subkind of guitar-playing event and thereby be correctly distinguished from *#the*

[2] An exception may be *galore*, which seems to be a determiner that require kinds (Morzycki 2011)—and, as this predicted, *piano galore* is well formed.

country guitar, which would on its kind reading require the existence of an instrument subkind instead. It may also correctly predict that adjectives modifying bare instrument terms get adverbial readings, with only the fairly minimal assumption that adjectives can sometimes denote properties of events, so that *excellent piano* could would get the denotation in (25):

(25) $[\![[_{DP}$ *excellent* EVENT *piano* $]]\!]$

$$= \cap\Big[\ \lambda e\ .\ \exists x^{o}\Big[\begin{array}{l} e \text{ is an event of playing } x^{o} \wedge \\ \textbf{piano}(x^{o}) \wedge \textbf{excellent}(e) \end{array}\Big]\Big]$$

Here we must confess to perpetrating a bit of compositional magic. Because *excellent* denotes a property of events, it must attach to a node that also denotes a property of events to be interpreted intersectively. But on our implementation, the shift to properties of events and the shift to kinds happen at the same point in the tree, so there is no node that denotes a property of events and therefore no appropriate place for the adjective to adjoin. The simplest solution would be to split the EVENT shift into two parts—the shift to events introduced by EVENT, and the shift to kinds by Chierchia's independent freely available nominalizing type shift applying subsequently—but space limits preclude us from pursuing this further.

4.4 Eventive readings of *play*

A major remaining question is how all this works to yield the observed readings for VPs headed by *play*. To assemble the pieces, we will need to first establish an empirical point. Alongside the familiar form of *play* that takes an instrument term as its object, there is what we'll call eventive *play*, which combines instead with an event:

(26) Clyde will play $\left\{\begin{array}{l} \text{the gig} \\ \text{the big closing number} \\ \text{the overture} \\ \text{an encore} \end{array}\right\}$.

Eventive *play* imposes on its complement the requirement that it denote some form of performance, as reflected in (27), but beyond that it is essentially a light verb. Its principal effect is to bring about as the VP denotation the property of being that event (we continue to assume the neo-Davidsonian thematic role strategy to introduce the agent):

(27) a. $[\![\textit{play}_{\textit{eventive}}]\!] = \lambda e : \textbf{performance}(e)\ .\ \lambda e'[e' = e]$

b. $[\![\textit{the gig}]\!] = \iota e[\textbf{gig}(e)]$

c. $[\![\textit{play}_{\textit{eventive}}\ \textit{the gig}]\!] = \lambda e'[e' = [\![\textit{the gig}]\!]] = \lambda e'[e' = \iota e[\textbf{gig}(e)]]$

With this, everything else falls into place. It is $\textit{play}_{\textit{eventive}}$ that occurs with bare instrument terms, and it can compose straightforwardly via Derived Kind Predication:

(28) $[\![\textit{play}_{\textit{eventive}}]\!] ([\![[_{DP}$ EVENT *piano* $]]\!])$

$$= \lambda e.\ [\![\textit{play}_{\textit{eventive}}]\!] ([\![[_{DP}\ \textit{piano}\ ]]\!])(e)$$

$$= \lambda e \,.\, \exists e'[\,{}^{\cup}[\![\, [_{DP}\ \text{EVENT}\ \textit{piano}\ ]\,]\!]\,(e') \wedge [\![\, \textit{play}_{\textit{eventive}}\,]\!]\,(e')(e)]\,] \quad \text{(by DKP)}$$

$$= \lambda e \,.\, \exists e'[\,{}^{\cup}\textbf{PIANO-PLAYING-KIND}(e') \wedge e = e']$$

$$= \lambda e \,.\, {}^{\cup}\textbf{PIANO-PLAYING-KIND}(e)$$

The resulting VP denotation is simply the property of being a realization of the piano-playing event kind—or, more simply, the property of being a piano-playing. Thus the generic flavor associated with the kind is defused, correctly predicting that there is nothing generic about *Floyd played piano yesterday*, and that it simply means that Floyd was the agent of an event of playing some piano. Of course, the generic flavor reemerges in *Floyd plays piano*, but that's due entirely to the habitual interpretation of English tense morphology.

With the other assumptions above, this also correctly predicts that *play excellent piano* should wind up with the same truth conditions as *play piano excellently* because it will simply involve the property of realizing the kind of excellent piano playings. Such an interpretation is blocked for *play the excellent piano* because *the* precludes an eventive reading.

5 Concluding remark and a look beyond instruments

This paper proposed a means of interpreting bare singular instrument terms that explains their eventive interpretations and the adverbial and subkind interpretations of adjectives that modify them. The crucial ingredient is a shift to kinds of events present only in the singular, which is syntactically incompatible with plural morphology and semantically incompatible with overt determiners—and conceptually incompatible with non-instrument terms because it lexically encodes that the relevant events are instrument-playings. This, coupled with independently motivated assumptions about kind reference and semantic composition, predicts the readings of bare singular instrument terms and their define counterparts. Along the way, we identified light-verb reading of *play* that may well be novel.

Having done this, it's natural to wonder just how specific or general this phenomenon is. Our account suggests it's very specific indeed, the consequence of a particular morpheme in English. That would of course be interesting in itself, and interesting for what it tells us about kinds, events, semantic composition, and so on. And yet, one has the sense that bigger fish lurk in this corner of the linguistic sea. We've already noted one respect in which this is the case—the Kiparsky (1997) and Harley (2008) facts about e.g. calving and saddling of horses. But it might be the case that it's possible to broaden our focus from instrument terms in a more incremental fashion. That's what sentences like (29) suggest:

(29) a. Clyde fries a good steak. *(Clyde is good at frying steak.)*
b. Floyd cuts good hair. *(Floyd is good at cutting hair.)*
c. Bertha throws a good ball. *(Bertha is good at ball-throwing.)*

These readings are a bit more unstable and variable across speakers than those of instrument terms, but clearly *something* must be going on here. After all, even

if the readings of adjectives in (29) are marginal, what's remarkable is that these readings are available at all. Moreover, there doesn't seem to be any variation with other judgments in this neighborhood. All speakers reject counterparts of (29) with a definite description, except as a characterization of some particular good hair or steak or ball. Equally robust is the judgment that the reading the objects in (29) receive seem not to be available in arbitrary syntactic positions, which distinguishes them from instrument terms:

(30) a. There was piano in that performance. (piano = piano playing)
b. There was hair in that cosmetics class. (hair ≠ hair-cutting)

Nevertheless, there does seem to be some sort of connection. There may also be a connection to cognate object constructions (as in *dream a nice little dream*) and semantic incorporation. Also an obvious issue for future research: to what extent do readings like the ones observed for bare instrument terms here occur cross-linguistically, and what compositional mechanisms give rise to them?

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