I present a compositional account of the semantics of Purépecha numeral classifiers according to which they denote ‘stubbornly distributive predicates’ (Schwarzschild 2009, [1]). In combination with a noun, classifiers yield a set of atomic entities, to the exclusion of plural individuals. Purépecha classifiers derive morphologically from positional roots that select their arguments based on the inherent shape of their referents (Nava 1994) [2]. I show that these positional roots have a strictly distributive interpretation: they can only be predicated of atomic elements and never of pluralities [3]. The characteristic individualizing role of classifiers (Cheng & Sybesma, 1999, Chierchia 1998) is achieved in Purépecha by intersecting a noun and a stubbornly distributive predicate, which entails that classifiers denote properties and do not correspond to an exclusively functional category like Number. Furthermore, the fact that the plural marker (–icha) and a classifier can co-occur in the same noun phrase [5] supports the claim that they fulfill different semantic roles (cf. Doetjes 1997, Chierchia 1998).

Purépecha has three classifiers: erhákwa, ichákwa, and ichúkwa. They are used with nouns referring to round, elongated, and flat objects, respectively (Friedrich 1970) [4-6]. Classifiers usually combine with number-neutral nouns of inanimate reference: kupanta ‘avocado(s)’, shanini ‘corn cob(s)’. Occasionally, these nouns can also take a plural marker –icha: kupant–icha ‘avocados’, shanini–cha ‘corn cobs’. Any of the two forms can take a classifier. Mass terms like itsi, ‘water’, or kwiripita, ‘meat’, and nouns of human reference, like achaati ‘man’, nanaka ‘girl’, never occur with classifiers. Classifiers in counting contexts are not obligatory, but they are only licensed by a numeral [4]. Unlike Chinese, (Cheng & Sybesma 1999, 2005), Purépecha does not allow bare classifier phrases in any syntactic position.

A natural question to ask about numeral classifiers is whether they have the same semantic function and syntactic type cross-linguistically. Cheng & Sybesma (1999) compare Chinese classifiers with determiners, since they fulfill some of the determiners’ characteristic roles: turning predicate-denoting NPs into arguments and ‘picking out’ an instance from a predicate denotation. Doetjes (1997) equates the function of classifiers and plural markers as “syntactic markers of countability”, which are required for the occurrence of numerals.

Purépecha classifiers cannot be analyzed under any of the above proposals. If they were akin to determiners, it would be possible for a classifier to introduce a nominal argument directly, which is not the case. Given their optionality in counting contexts, they cannot be responsible of licensing numerals. And since classifiers co-occur with the plural marker –icha, they have a clearly different semantic and syntactic role than number morphology.

We adopt Link’s (1983) analysis of plural markers as sum-forming operators. The plural marker –icha thus denotes the closing under sum of a set of individuals [7]. Classifiers denote a property that is true only of atomic individuals (the property of being round, elongated or flat). When this property is combined by Predicate Modification with the set denoted by the noun, the result is a set of entities that satisfy both the description in the classifier and the description in the noun, and the semantics of the classifier forces set has to be a set of atomic entities [8].

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1 Purépecha, (Tarascan ISO 639-3: tsz) is a language isolate spoken in the state of Michoacán, Western Mexico. According to the 2005 census, there are 105,556 speakers of Purépecha; 15,853 less than in 2000 (INEGI). Only around 5% of the Purépecha speakers are monolingual. Unless noted otherwise, the data used in this paper come from my own fieldwork (2008-2011).
Examples

[1] Stubbornly distributive Predicates (Schwarzschild 2009):
   a. The boxes are heavy.   DISTRIBUTIVE AND COLLECTIVE READINGS
   b. The boxes are round. DISTRIBUTIVE READING ONLY

   pot   round.object-patio-PFVE-3IND
   ‘The pot is lying on the patio’
   b. Phankwa ichá-nu-h-ti.
   broom   long.object-patio-PFVE-3IND
   ‘The broom is lying on the patio’
   pot   long.object-patio-PFVE-3IND
   Intended: ‘The pot is lying on the patio’

   dirt   round.object-patio-PFVE-3IND
   ‘The dirt is on the patio’
   b. Echéri umbá-nu-h-ti
   dirt   heaped.up-patio-PFVE-3IND
   ‘The dirt is heaped up in the patio’

   I   make-FUT-1/2IND-1SG   one   round.object-DEV   bread
   (DEV: deverbal)
   ‘I will make a single piece of bread’

   bring-APPL=2SUBJ.1OBJ   five   long.object-DEV   bone-PL-OBJ
   ‘Bring me five bones’

   Three   flat.object-DEV   tortilla   dry-PERF-3IND-3PL
   ‘Three tortillas dried out’

   b. [purhú] = λx.pumpkin’(x)
   c. [érhákwa purhú] = λx.round.object’(x) ∧ pumpkin’(x)

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