Chapter 7

Numerals and classifiers

7.1 Cardinal numerals

Cardinal numerals in Kamya are essentially a subset of quantifiers (see **??**). As such, they occupy the same slot in the noun phrase, occurring before the adjective and noun but after all other determiners. In addition, as with quantifiers, overt number marking on the noun is not permitted after a cardinal number (see **??**).

(1) a. Iz çoça gendi.
iz çoça gendi
three big parsnip.NOM
'Three big parsnips.'

b. * Iz çoça gendida.
iz çoça gendi-da-Ø
three big parsnip-PL-NOM
Intended: 'Three big parsnips.'

When used alongside another quantifier, which is possible if a little uncommon (and is only logically able to occur with a limited number of quantifiers), the numeral comes second.

(2) Na koş gura şemiz.
na koş gura şemiz
DEF all four sibling.NOM
'All four siblings.'

In addition, it should be noted that Kamya also possesses numeral classifiers. Though these are optional, they are nevertheless relatively common (see §7.2 for more information). These occur immediately following a cardinal numeral but before adjectives.

(3) a. Casi sak luçe.
casi sak luçe
six CL chair.NOM
'Six chairs.'

b. Casi sak oyi luçe.
casi sak oyi luçe
six CL blue chair.NOM
'Six blue chairs.'

The numeral system in Kamya is slightly unusual typologically speaking because, although it is primarily base 10 (or decimal) in nature, it also has residual sub-base of base 9 (or nonary). Firstly, as shown in (4) below, the numerals one to ten have unique roots.

(4)	a.	ser	'one'	f. casi	'six'
	b.	dişi[1]	'two'	g. tet	'seven'
	c.	iz	'three'	h. buç	'eight'
	d.	gura	'four'	i. kama	'nine'
	e.	san	'five'	j. keneç	'ten'

Note that there is no dedicated word for 'zero' or 'nought' in Kamya, though the negative pronoun *bide* 'nothing' and the negative quantifier *biş* 'no, none' are used to fulfil this function, with *biş* being used either when there is a noun being modified (e.g. *biş ala* 'zero eggs') or when a noun is absent whereas *bide* is used only in the latter case.

The reason that Kamya exhibits a partially base-9 number system is most likely because of the unusual fashion in which the Kamya people traditionally counted using the digits of their hands. The index finger represents one, the index and middle fingers together represent two, the index, middle and ring fingers represent three, the whole hand except the thumb represents four, the thumb on its own represents five, the thumb and the index finger together represent six, the thumb and the index and middle fingers represent seven, the whole hand except the little finger represents eight and the whole hand represents nine. The fist with no digits extended represents zero. This is depicted graphically in Figure 1 below.

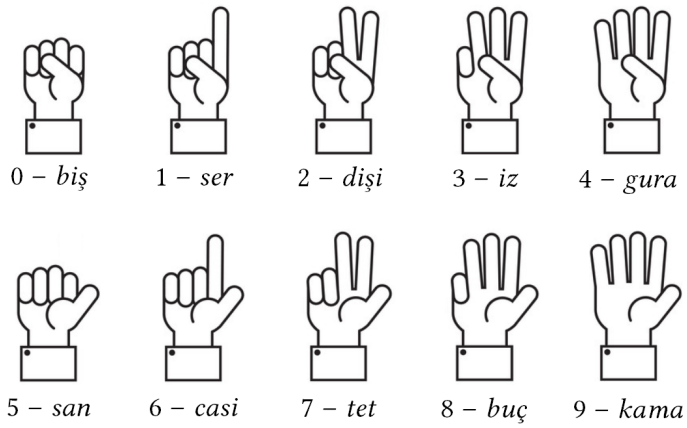

Figure 1: Traditional Kamya finger-counting system

1 The numeral *dişi* also has an apocopated monosyllabic version, namely *diş'*, which is used when counting up or down and in various derived forms.

The historical base-9 system and influence of finger-counting also appears to be visible in the etymology of certain cardinal numbers. Namely, *gura* 'four' appears to be related to *gurhan* 'palm', *san* 'five' to *sano* 'thumb' and *kama* 'nine' to *kaw* 'hand'. In addition to these, the ordinal numeral *muren* 'first' (see §7.3) seems to be historically related to *mun* 'finger' (cf. also *murak* 'grip, handle').

The current mixed system almost certainly came about due to extended contact with languages that use base-10 numeral systems. Indeed, it seems that *keneç* 'ten' was not originally of native Kamya stock, perhaps being a development of an early borrowing from an unknown Indo-European language (cf. e.g. Proto-Italic **dekem* and Proto-Celtic **dekam*).

The relatively recent adoption of the word *keneç* 'ten' and a base-10 numeral system would also go some way to explaining the inconsistencies in the current forms of the "teen" numerals, which are listed in (5) below.

(5)

a.	kandiş	'eleven'	f.	kençecasi	'sixteen'
b.	kamiz	'twelve'	g.	kençetet	'seventeen'
c.	kençiz	'thirteen'	h.	dişkama	'eighteen'
d.	kençegura	'fourteen'	i.	kençekama	'nineteen'
e.	kençesano	'fifteen'			

It can be seen that the words for 'eleven', 'twelve' and 'eighteen' appear to be historically formulated as '9+2', '9+3' and '2x9' respectively (i.e. roughly **kama-dişi* > *kandiş*, **kama-iz* > *kamiz* and **dişi-kama* > *dişkama*). The remainder of the numerals in (5) are simply compounds of *keneç* 'ten' and the appropriate unit numeral.

Similarly to the majority of the teens, the numerals for the tens are based on the units followed by a reduced form of *keneç* 'ten', namely *-keç*. This can be seen below in (6).

(6)

a.	dişkeç	'twenty'	e.	casikeç	'sixty'
b.	iskeç	'thirty'	f.	tetekeç	'seventy'
c.	gurakeç	'forty'	g.	buçukeç	'eighty'
d.	sankeç	'fifty'	h.	kamakeç	'ninety'

Notice that *dişkeç* 'twenty' is formed with the apocopated version of *dişi* 'two' (see footnote 1 above) and that the final consonant of *iz* 'three' undergoes irregular voicing assimilation rather than epenthesis applying as would usually be expected and as seen in other numerals in (6f) and (6g) (see **??** for more on epenthesis).

Aside from the teens in (5), the numerals in between the tens are formed with a numeral for the tens and a numeral for the units linked by the conjunction *va(n)* 'and',

though this is often actually omitted in fast or colloquial speech. This illustrated in (7) with various combinations.

(7)
a.	dişkeç va ser	'twenty-one'	e.	casikeç va san	'sixty-five'
b.	iskeç va dişi	'thirty-two'	f.	tetekeç va casi	'seventy-six'
c.	gurakeç van iz	'forty-three'	g.	buçukeç va tet	'eighty-seven'
d.	sankeç va gura	'fifty-four'	h.	kamakeç va buç	'ninety-eight'

The larger numerals—i.e. for 100 and above—make use of further unique roots, specifically, *çenez* for 'one hundred' and *jara* for 'one thousand'. These are used in constructing all larger numbers, with the conventionalised word for 'one million' (in the short scale, i.e. 1,000,000) being *jaradha*. That is, *jara* and the nominal augmentative suffix *-dha*. This is shown by a selection of examples in (8).

(8)
a.	çenez	'one hundred'
b.	dişi çenez	'two hundred'
c.	jara	'one thousand'
d.	iz jara	'three thousand'
e.	keneç jara	'ten thousand'
f.	çenez jara	'one hundred thousand'
g.	gura çenez jara	'four hundred thousand'
h.	jaradha	'one million'
i.	san jaradha	'five million'
j.	keneç jaradha	'ten million'
k.	çenez jaradha	'one hundred million'
l.	casi çenez jaradha	'six hundred million'
m.	jar jaradha	'one billion'
n.	tet jar jaradha	'seven billion'
o.	jaradha jaradha	'one trillion'
p.	buç jaradha jaradha	'eight trillion'
q.	jar jaradha jaradha	'one quadrillion'
r.	kama jaradha jaradha	'nine quadrillion'
s.	jaradha jaradha jaradha	'one quintillion'

From *jaradha jaradha* 'one trillion' onwards, the numerals become rather unwieldy but are in theory possible. However, in practice, this is not a problem as their use is very seldom, if ever, required by speakers of the language.

7.2 Numeral classifiers

Kamya exhibits a grammatical phenomenon known as numeral classifiers—or more specifically sortal as opposed to mensural classifiers.[2] The system of numeral classifiers found in Kamya is relatively restrained (compared to that, say, of Mandarin Chinese; see e.g. Yip & Rimmington 2004: §§2.8–2.14). It uses a relatively small number of classifiers—only five—and their use is optional (somewhat akin to classifiers in Turkish and Indonesian; see e.g. Göksel & Kerslake 2005: §15.8 and Sneddon 1996: §2.21 respectively).

For the most part, numeral classifiers in Kamya are used only in conjunction with quantifiers or cardinal numerals and are also only found with count nouns (see §§**??** and 7.1). With larger numerals—roughly from *jara* 'one thousand' and up—classifiers are seldom used. Classifiers are also not ordinarily used with abstract nouns. As with quantifiers or cardinal numerals, overt plural marking on the modified noun is ungrammatical with classifiers.

(9) a. Kama (sak) ruzaç.
kama sak ruzaç
nine CL pebble.NOM
'Nine pebbles.'

b. * Kama (sak) ruzaçada.
kama sak ruzaç-ada-Ø
nine CL pebble-PL-NOM
Intended: 'Nine pebbles.'

(10) a. Gara (sak) ruzaç.
gara sak ruzaç
much CL pebble.NOM
'Many pebbles.'

b. * Gara (sak) ruzaçada.
gara sak ruzaç-ada-Ø
much CL pebble-PL-NOM
Intended: 'Many pebbles.'

The use of numeral classifiers often imparts a sense of individuation. Similarly, they may be used as intensifiers of sorts, especially with quantifiers as opposed to numerals. Additionally, a classifier can be used to highlight the salience of a particular noun in the discourse.

There is a small closed class of five numeral classifiers in Kamya, given in (11) below, all of which are also common nouns. Nevertheless, they are grammatically distinct as they exhibit special morphosyntactic properties. That is, in addition to their normal nominal uses and behaviour, they are unique in the language in that they are also used following numerals or quantifiers in noun phrases whilst remaining themselves unmodified and also not requiring any further modification of the head noun. Classifier-like partitive constructions, however, must use the genitive case (see **??**).

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2 For details on this distinction, see e.g. Aikhenvald (2000: §4.4.1) and Gil (2013b) among others. In Kamya, mensural classification is achieved with a partitive construction rather than classifiers *stricto sensu* (see **??**).

(11)
a.	hiri	‘person, individual’	d.	şafo	‘string, thread’
b.	ucu	‘body’	e.	thur	‘stick, rod’
c.	sak	‘piece, thing, item’			

Of these, the first two are used as numeral classifiers for animate nouns, with *hiri* being used for human animate nouns and *ucu* for non-human animate nouns. Using the classifier *ucu* for humans is typically considered derogatory.

(12) a. Dani hiri samata.
dani hiri samata
every CL teacher.NOM
‘Every teacher.’

b. Kama ucu horok.
kama ucu hork
nine CL hen.NOM
‘Nine hens.’

The remaining three classifiers are used with inanimate nouns. Firstly, *sak* is used as a generic inanimate classifier. It is able to be used with any inanimate noun but is generally limited to those nouns not covered by the remaining two classifiers.

(13) a. Buç sak gido.
buç sak gido
eight CL table.NOM
‘Eight tables.’

b. Gara sak domol.
gara sak doml
much CL orange.NOM
‘A lot of oranges.’

The classifier *şafo* is used with a relatively small set of nouns denoting long thin flexible objects such as ropes, hoses and cables.

(14) a. Dişi şafo koso.
dişi şafo koso
two CL rope.NOM
‘Two ropes.’

b. Garaşe şafo guli.
garaşe şafo guli
various CL hose.NOM
‘Various hoses.’

Lastly, in direct contrast with *şafo*, *thur* is used with nouns denoting long thin rigid objects, e.g. sticks, pencils, candles and certain upright-standing plants.

(15) a. Iz thur hergenuç heki.
iz thur hergen-uç heki
three CL iron-ADJ bar.NOM
‘Three iron bars.’

b. Taha thur waça.
taha thur waça
some CL tree.NOM
‘Some trees.’

The choice of numeral classifier for inanimate nouns is not necessarily fixed—though by far the commonest variation is to use the catch-all inanimate numeral classifier *sak* instead of a more precise one.

For those nouns with co-ordinate count–mass pairs, especially fruit and vegetables, if a classifier is used, the count noun is usually preferred, though the mass noun will very occasionally be used in conjunction with a classifier by some speakers.

(16) a. Tet sak emel.
tet sak eml
seven CL apple.NOM
'Seven apples.'

b. (#) Tet sak emlanya.
tet sak eml-anya-Ø
seven CL apple-MASS-NOM
'Seven apples.'

If *hiri* is used as a noun with a classifier, that classifier must be *ucu*. However, this is rare, especially with numerals, since *hiri* already has the same strong individuating connotations that using a classifier conveys.

(17) a. Kençiz hiri.
kençiz hiri
thirteen individual.NOM
'Thirteen individuals.'

b. Şeda ucu hiri.
şeda ucu hiri
a.few CL individual.NOM
'A few individuals.'

Similarly, if *ucu* is used as a noun, a classifier is not usually used, though the usually inanimate classifier *sak* can be used if necessary or desired.

(18) a. Gura ucu.
gura ucu
four body.NOM
'Four bodies.'

b. (#) Rawiz sak ucu.
rawiz sak ucu
few CL body.NOM
'Few bodies.'

If *şafo* and *thur* are used as nouns with a classifier, that classifier must be *sak*.

(19) a. Şeda sak şafo.
şeda sak şafo
a.few CL string.NOM
'Some strings.'

b. Gaşek sak thur.
gaşek sak thur
loads CL rod.NOM
'A load of rods.'

However, when *sak* is used as a noun, a classifier can never be used.

(20) a. Eşek sak.
eşk sak
too.much thing.NOM
'Too many things.'

b. * Eşek sak sak.
eşk sak sak
too.much CL thing.NOM
Intended: 'Too many things.'

With a definite article, the use of a classifier following a numeral can communicate a partitive meaning, though this is ambiguous with a straight definite reading.

(21) a. Na dişi sak kulba.
na dişi sak kulba
DEF two CL plum.NOM
'Two of the plums.'

b. Na dişi (sak) kulba.
na dişi sak kulba
DEF two CL plum.NOM
'The two plums.'

Numeral classifiers are generally incompatible with *şi* 'a(n)' on its own, though not, of course, with the numeral *ser* 'one'.

(22) a. * Şi hiri çeheta.
şi hiri çeheta
INDEF CL actor.NOM
Intended: 'An actor.'

b. Ser (hiri) çeheta.
ser hiri çeheta
one CL actor.NOM
'One actor.'

However, *şi* may be found in its apocopated form with a classifier if the adjective *ija* '(an)other, different' is also used. This is not possible with other adjectives. Note also that, in this respect, *ija* acts like a determiner as it precedes classifiers rather than following them as other adjectives do.

(23) a. Ş' ija (sak) kepek.
ş' ija sak kepk
INDEF other CL knife.NOM
'Another knife.'

b. * Şi sak zuna kepek.
şi sak zuna kepk
INDEF CL large knife.NOM
Intended: 'A large knife.'

Classifiers are not used in contexts of measurement, e.g. between numerals and words such as *kilo* 'kilo' or *çenzegrazak* 'hectare'.

(24) a. * Keneç sak litir.
kenç sak litr
ten CL litre.NOM
Intended: 'Ten litres.'

b. Keneç litir.
kenç litr
ten litre.NOM
'Ten litres.'

Similarly, words denoting periods of time, such as *tem* 'hour' and *seboro* 'month', are necessarily used without a classifier.

In writing, when the written numeral (e.g. *6*) rather than the spelt-out word (e.g. *casi*) is used, it is common to omit the classifier, whether it is intended to be read out or not. This is especially common in lists of items.

Lastly, it is possible to use numeral classifiers without an overt head noun.

(25) Şel ta cal şi sukodaz? — Eç, reça ceş gura sakaz.

şel ta cal şi suko-da-z eç reç-a ceş gura sak-az
Q 2SG.NOM want.PRES INDEF flake-PL-ACC yes give-IMP 1SG.DAT four CL-ACC
'Do you want any tokens? — Yes, give me four of them.'

(26) Şel kişun ta maldit şi kezdaz? — Agad, biş ucuz.

şel kişun ta mal-dit şi kez-da-z agad biş ucu-z
Q today 2SG.NOM see-NPST INDEF dog-PL-ACC no none CL-ACC
'Did you see any dogs today? — No, not one.'

As in the examples provided above, such a usage is almost always anaphoric in some way.

7.3 Ordinal numerals

Ordinal numerals function as adjectives and are usually accompanied the definite article.

(27) Na dişula serkişa mar.

na dişula serk-işa mar
DEF second moon-LOC person.NOM
'The first man on the moon.'

However, it is still possible to use ordinal numerals with the indefinite article.

(28) Şi muren çerfuşa fezam.

şi muren çerfu-şa fezam
INDEF first sand-LOC soldier.NOM
'One of the first soldiers on the beach.'

Note that it is not felicitous to use ordinal numerals with numeral classifiers (see §7.2).

(29) a. * Na cere izula sak soma.
na cere izula sak soma
DEF 1SG.GEN third CL house.NOM
Intended: 'My third home.'

b. Na cere izula soma.
na cere izula soma
DEF 1SG.GEN third house.NOM
'My third home.'

As with approximately 35% of the world's languages (see Stolz & Veselinova 2013), in Kamya, all ordinal numerals but 'first' are derived from their corresponding cardinal numerals. This is exemplified in (30) below.

(30)

a.	muren	'first'	f.	casila	'sixth'
b.	dişula	'second'	g.	tetula	'seventh'
c.	izula	'third'	h.	buçula	'eighth'
d.	gurawla	'fourth'	i.	kamawla	'ninth'
e.	sanula	'fifth'	j.	kençula	'tenth'

These example show that there is suppletivism between ordinal *muren* 'first' and cardinal *ser* 'one', with **serula* not being an acceptable stand-alone word in Kamya.[3] However, this

3 In most varieties of Kamya, cardinal numerals ending in *ser*, such as *dişkeç va ser*, take *muren* rather than **serula* in their ordinal forms. Nonetheless, there are a minority of speakers who do in fact use *serula* but only in complex forms and never on its own (cf. the use of *unième* in complex ordinals in French; see e.g. Price 2008: 129–31).

is not the case for all other ordinal numerals (except 'eighteenth'), which are formed by adding the proprietive adjectival suffix *-(u/w)la* to the corresponding cardinal numeral.[4] As seen in (30b), *dişula* 'second' uses the apocopated form of *dişi* 'two' as its base (hence **dişila* is ungrammatical).

Finally, there is also a special irregular ordinal form for 'eighteenth', namely *dişkamen* rather than the expected **dişkamawla* (though the latter is occasionally found but is proscribed).[5]

7.4 Fractional numerals

Fractional numerals in Kamya are formed by adding the suffix *-(V)ska* to the corresponding cardinal numerals, as exemplified in below.

(31)

a.	iziska	'a third'	e.	teteska	'a seventh'
b.	guraska	'a quarter'	f.	buçuska	'an eighth'
c.	sanaska	'a fifth'	g.	kamaska	'a ninth'
d.	casiska	'a sixth'	h.	kençeska	'a tenth'

The one exception to this is the suppletivism found between cardinal *dişi* 'two' and fractional *turuz* 'half'. In addition to this, there is a dedicated term for 'one and a half', namely *zutu*.

In terms of their syntax, fractional numerals are able to be used in two ways. Firstly, and most commonly, they may be used much like nouns in partitive constructions (see **??**). That is, they head noun phrase and are preceded by a modifying noun in the genitive case. Though they usually take an indefinite article, fractional numerals may also be preceded by a definite article (see **??** for usage of the articles).

(32)

a. Şi spulure guraska.
şi spulu-re guraska
INDEF cake-GEN quarter.NOM
'A quarter of a cake.'

b. Na laydere turuz.
na layda-re turz
DEF money-GEN half.NOM
'Half the money.'

Secondly, they may be used in the same way as cardinal numerals, i.e. unmodified in the quantifier slot of the noun phrase (see also §§**??**, 7.1 and **??**). This usage, however, is much

4 This suffix is realised as *-ula* after all consonants, as *-wla* after /o/ and /a/ and elsewhere as *-la*.

5 This is irregular in the sense that it does not employ the usually suffix for deriving ordinal from cardinal numerals; nevertheless, it is still derived from the cardinal *dişkama* 'nineteen', unlike the suppletive pair *ser* 'one' and *muren* 'first'.

rarer and largely restricted to lists of items, especially in which (non-fractional) cardinal numerals also feature, as in (33).

(33) Ceş çutor ser domol, dişi emel va turuz sumuç.

ceş çut-o-r-Ø ser doml dişi eml va turz sumç
1SG.DAT need-MDP-PL-PRES one orange.NOM two apple.NOM and half lemon.NOM
'I need one orange, two apples and half a lemon.'

In this syntactic context, it is possible to use numeral classifiers (§7.2) with fractional numerals.

Lastly, multiples of fractions are formed simply by placing a cardinal numeral before a fractional numeral.

(34)
a. dişi iziska 'two thirds'
b. iz guraska 'three quarters'
c. gura sanaska 'four fifths'
d. san casiska 'five sixths'

Note, however, that this is not ordinarily done with *ser* 'one' (nor indeed *şi* 'a(n)).

7.5 Collective numerals

Collective numerals numerals are effectively normal nouns in Kamya. They are formed by way of the suffix *-ero*. This is done with single-word numerals only.

(35)
a. dişero[6] 'pair, couple, duo'
b. izero 'trio, threesome'
c. gurero[7] 'quartet, foursome'
d. kençero 'tensome'
e. kamizero 'dozen'
f. çenzero 'hundredsome'

In context, as any other nouns do, collective numerals require an article in the singular and are also able to take the plural marker *-da*. They also use the same type of genitive construction as a normal noun in a partitive usage (see **??**).

(36) Cen gihit şi felare dişeroz.

cen gih-it şi fela-re dişero-z
1SG.NOM buy-NPST INDEF sock-GEN twosome-ACC
'I bought a pair of socks.'

(37) A akit fire kençerodaz.

a ak-it fir-e kençero-da-z
3SG.NOM eat-NPST potato-GEN tensome-PL-ACC
'He ate tens of potatoes.'

6 Formed on the basis of the apocopated form of the cardinal numeral *dişi* 'two'.

7 Formed from *gura* 'four' with regular vowel hiatus resolution (see **??**).

7.6 Distributive numerals

Distributive numerals in Kamya are derived from cardinal numerals by addition of the adverbial suffix *-(i)ci* and subsequent whole-word reduplication (see **??**).[8]

(38)

a.	serici serici	'one by one'	d.	guraci guraci	'four apiece'
b.	dişici dişici	'two each'	e.	sanici sanici	'five each'
c.	izici izici	'in threes'	f.	casici casici	'in sixes'

Kamya is somewhat similar to, for example, Hausa (Newman 2000: 381–2) in which distributive numerals are also formed by whole-word reduplication and adnominal and adverbial distributive numerals are formally identical (though Hausa does not use a suffix in addition to reduplication). In addition, in Turkish, adverbial distributive numerals are formed by way of a suffix and whole-word reduplication whereas adnominal distributive numerals are created with the same suffix but no reduplication (Göksel & Kerslake 2005: 183). Cross-linguistically, reduplication appears to be the most common strategy, especially in Africa, South Asia and the Caucasus (Gil 2013a).

In Kamya, the distributive numerals are able to fulfil two separate roles: adnominal and adverbial distributive numerals.

The adnominal usage, discussed below, can usually be translated as '*x* … each' or '*x* … apiece' where *x* is a given numeral. Firstly, consider the sentence in (39), which uses an ordinary cardinal rather than distributive numeral. Here, in Kamya, it is implied that there are only two suitcases in total.[9]

(39) Hay ledher dişi çemkebakaz.

hay ledher dişi çemkebak-az
3PL.NOM carry.PL.PRES two suitcase-ACC
'They are carrying two suitcases.'

However, it can be specified periphrastically that each person is carry two suitcases by modifying the subject with the quantifier *dani* 'each'.

(40) Dani hay ledher dişi çemkebakaz.

dani hay ledher dişi çemkebak-az
each 3PL.NOM carry.PL.PRES two suitcase-ACC
'They are carrying two suitcases each.'

8 For information on distributive numerals cross-linguistically, see Gil (2013a) for a brief overview and Gil (1982) et seq. for more in-depth discussion.

9 The equivalent English sentence is more ambiguous between that same interpretation and one in which each person is carrying two suitcases.

Alternatively, a distributive numeral may be used adnominally on the object instead.

(41) Hay ledher dişici dişici çemkebakaz.
hay ledher dişi-ci dişici çemkebak-az
3PL.NOM carry.PL.PRES two-ADV RDP suitcase-ACC
'They are carrying two suitcases [each].'

Note that, unlike (40), the example in (41) also has the alternative interpretation that there are multiple events in which a total of only two suitcases are carried on each occasion.

The distributive numerals can also be used adverbially as well as adnominally. This usage is best translated into English as either 'in *x*s' or '*x* by *x*' according to context. In this role, by default they are found pre-verbally, though they are often moved to the end of the phrase as they are moderately heavily adverbs and may also be fronted, usually to focus the numeral. These possibilities are illustrated in (42) below.

(42) a. Hay dişici dişici ledher çemkebakaz.
hay dişi-ci dişici ledher çemkebak-az
3PL.NOM two-ADV RDP carry.PL.PRES suitcase-ACC
'They are carrying the suitcases two by two.'

b. Hay ledher çemkebakaz dişici dişici.
hay ledher çemkebak-az dişi-ci dişici
3PL.NOM carry.PL.PRES suitcase-ACC two-ADV RDP
'They are carrying the suitcases two by two.'

c. Dişici dişici hay ledher çemkebakaz.
dişi-ci dişici hay ledher çemkebak-az
two-ADV RDP 3PL.NOM carry.PL.PRES suitcase-ACC
'They are carrying the suitcases two by two.'

As in the adnominal function, the examples in (42) may mean that each person is carrying two suitcases or that there were multiple instances of carry two suitcases in total.

When discussing people walking or running, for example, the distributive numerals can also be used similarly to the construction '*x* abreast' in English.

(43) Me ganardit izici izici.
me gana-r-dit iz-ici izici
1PL.NOM walk-PL-NPST three-ADV RDP
'We were walking three abreast.'

Very generally, the higher the numeral, the less common the distributive numerals are, nevertheless higher numbers are still possible.

Finally, the adverbial role of and the way in which distributive numerals are formed can be extended to use with certain nouns (similar to constructions of the form '*y* by *y*' in English, where *y* is a noun). However, although a very small number of nouns do take the adverbial suffix *-(i)ci*, most instead will take the instrumental case (**??**) with others taking the locative case (**??**).

(44)

a.	dowta dowta	'drop by drop'	e.	sidhata sidhata	'grain by grain'
b.	hirita hirita[10]	'person by person'	f.	sopota sopota	'piece by piece'
c.	komici komici	'from time to time'	g.	spiçata spiçata	'brick by brick'
d.	lazişa lazişa	'from time to time'			

7.7 Adverbial and multiplier numerals

Adverbial and multiplier numerals in Kamya are formed from cardinal numerals with the suffix *-erin*.

(45)

a.	serin[11]	'once'	d.	(#)gurerin[13]	'four times'
b.	dişerin[12]	'twice'	e.	(#)sanerin	'five times'
c.	izerin	'thrice'	f.	(#)casiyerin	'six times'

These are able to be used as both adverbs and adjectives to indicate either the number of times a particular action occurs or a change in magnitude. In the adverbial function, the two senses may be distinguished by word order, with a post-verbal position unambiguously conveying the first sense and a post-verbal position the second.

(46) Na şideyam çeghat dişerin.

na şideyam çegha-t dişerin
DEF patient.NOM sneeze-NPST twice
'The patient sneezed twice.'

(47) Haza na başira dişerin falahindit.

haza na başira dişerin falahin-dit
yesterday DEF total.NOM twice rise-NPST
'The total rose two-fold yesterday.'

In the adjectival function, however, both can only occur in a pre-nominal position, though context is usually enough to infer which sense is intended.

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10 This is a common alternative to *serici serici* 'one by one' when discussing people.

11 This is *serin* rather than the expected **sererin* due to irregularly haplology.

12 Based on the apocopated form of *dişi* 'two'.

13 When used, this takes the form *gurerin* instead of **guraherin* due to the outcome of regular vowel hiatus resolution (see **??**).

(48) A ş’ izerin comata.

a Ø ş’ izerin comata
3SG.NOM COP.PRES INDEF thrice winner.NOM
‘He is a three-time winner.’

(49) N’ izerin herinira ketha talayadamanaz.

n’ izerin herinira ketha talayadaman-az
DEF thrice decrease.NOM beget.PRES difficulty-ACC
‘The three-fold decrease is causing problems.’

Note that, in the adverbial function, after *izerin* ‘thrice’, these are rarely, if ever used, with a periphrastic construction being preferred.

(50) a. # Kişun cen vandit di sanerin na kawaz.
kişun cen vand-it di sanerin na kaw-az
today 1SG.NOM wash-NPST already five.times DEF hand-ACC
‘I’ve already washed my hands five times today.’

b. Kişun cen vandit di na kawaz san lazişa.
kişun cen vand-it di na kaw-az san laz-işa
today 1SG.NOM wash-NPST already DEF hand-ACC five occasion-LOC
‘I’ve already washed my hands five times today.’

However, since such periphrastic constructions are generally considered heavy, although they still follow the verb, verbal arguments such as direct objects will often intervene, as in (50b).

7.8 Denumeral nouns

Although the cardinal numerals (see §7.1) are able to behave somewhat similar to nouns as they can be used without a head noun and take case marking, they are usually used anaphorically in such situations. There is, however, a set of nouns derived from the cardinal numerals that are true nouns and fulfil different functions. These are the so-called “denumeral nouns” and they are formed by adding the suffix *-(V)n* to the cardinal numerals. The only exception to this is that *ser* ‘one’ becomes *sereç* (stem: *serç-*) rather than expected **seren*.[14] This is exemplified in (51) below for the numerals two to ten; all other denumeral nouns are formed in the same way.

(51) a. dişin ‘two’ c. guran ‘four’
b. izin ‘three’ d. sanan ‘five’

14 Note that the form *seren* does exist in Kamya but as an adjective meaning ‘single, sole, unique’ derived using a different suffix, namely the adjectival suffix *-en*.

e. casin ‘six’
f. teten ‘seven’
g. buçun ‘eight’
h. kaman ‘nine’
i. kençen ‘ten’

These forms are used to refer to numerals when they represent certain concepts rather than quantification per se. Examples of this are playing cards, banknotes and academic marks.

(52) Ceş çuto şi bişçare casin.

ceş çut-o-Ø şi bişça-re casi-n-Ø
1SG.DAT need-MDP-PRES INDEF heart-GEN six-NM-NOM
‘I need a six of hearts.’

(53) Şel teş usi şi kençen?

şel teş usi şi kenç-n-Ø
Q 2SG.DAT EXIST.PRES INDEF ten-NM-NOM
‘Have you got a tenner?’

(54) Cen co leşet şi sananaz angluçiş.

cen co leşe-t şi san-n-az angluç-iş
1SG.NOM MIR obtain-NPST INDEF five-NM-ACC English-DAT
‘I got a five in English.’

Denumeral nouns may also be used when talking about the cardinal numerals themselves.

(55) Teresa şi buçunaz na brodhazuri.

tere-sa şi buç-n-az na brodh-azuri
write-IMP INDEF eight-NM-ACC DEF paper-ALL
‘Write an eight on the paper.’

Notice that denumeral nouns take the same determiners and case marking as normal nouns would when used in the same situation.

Abbreviations

1	first person
2	second person
3	third person
ACC	accusative
ADJ	adjectiviser
ADV	adverbialiser
ALL	allative
CL	numeral classifier
COP	copula
DAT	dative
DEF	definite
EXIST	existential verb
GEN	genitive
IMP	imperative
INDEF	indefinite
LOC	locative
MASS	mass noun
MDP	mediopassive
MIR	mirative
NM	nominaliser
NOM	nominative
NPST	near past
PL	plural
PRES	present
Q	question particle
RDP	reduplication
SG	singular

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