D U O D E C I M A L

N E W S C A S T

Year 3
No.2
September
1175

The Duodecimal Society of Great Britain,
106, Leigham Court Drive, Leigh-on-Sea, Essex.

Price:
1 shilling.

Contents

E D I T O R I A L

When we decided upon our provisional official numerals and their names, ᘔ for ten and ᘓ for eleven, we said that we hope that other schemes will continue to be developed. It is therefore apposite that this issue should contain articles dealing with two proposals and a summary of all those so far known to the Society. The Secretary will be pleased to know of any other schemes in existence.

In the next issue of the Newscast we shall publish the result of the Questionnaire on units of Circle, Time, Temperature, Weights and Money circulated to Members with the last Newscast. Will you please send it back with your opinion if you have not done so already. If anyone else would like to voice their opinion too, the Secretary will gladly send a copy of the Questionnaire to be completed.

Whatever the advantages and disadvantages should Britain join the Common Market, it will affect our work in that there will be an increased pressure to decimalize. This means that the Duodecimal Society of Great Britain must be strengthened — it is essential that we advertise ourselves more and that more Members join — so that we may turn any links with the Continent to our favour — to lead and not be misled. Every Member and friend must help.

D U O D E C I M A L D A N

The South African Government, in order to popularise and explain their new decimal system, have launched a pop song, "Decimal Dan". The Duodecimal Society of Great Britain, just now in need of all the help it can get, might adopt the idea.

SOLO: Duodecimal Dan
Is a sensible man
He don't count in tens, oh no!
One, two, three, four, five, six, seven, eight --
So far it's corny but, man, just wait,
There's nine, dek, el and do!

MASSED CHOIR (wonderingly): Do-o-o-o-o-o-o?

SOLO: Do-one, do-two and now your're away --
Just keep on counting until you say
Elty-dek, elty-el, one gro!

CHOIR (triumphantly): Gro-o-o-o-o-o-o'.

SOLO: The months in the year
Stay just as they were,
Inches and pence also.
Do shiny shillings make a tidy little pound.
Lop some yards off the mile and you're left with a round
Figure which we call ten gro.*

CHOIR: Ten gro-o-o-o-o-o-o.

SOLO: A quarter's .3 and a third's .4
(parlando: Man, jus' dig dat duodecimal point!)
And it ain't agwine to recur no more.
Which only goes to show
You must vote for dek, el, do.

CHOIR: (militantly): And gro-o-o-o-o-o-o.

* And if anyone at the AGM of the Duodecimal Society next Tuesday suggests "One Douzand" I hope he gets thrown out.

PETER DICKINSON.

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NEW DUODECIMAL NOTATIONS AND NAMES

Offprint No.7

The continued interest of members, expressed in correspondence with the Secretary, suggests that a list of all the schemes known to the Secretary would be useful. 'Duodecimal Newscast' January 1174 contained a list of all known proposals for ten and eleven only.

Present Convention	A.D. Gautier	E. Stryvor	Kingsland Camp	D.A. George	Louis Loynes		A. Chilton	Shaun Ferguson	F. Ruston	R.J. Hinton	D.A. Sparrow
0	0	o	↺	↺	O/Z	O/M	O	O	↺	o	↺
1	↗	a	∠	|	I	A	/	|	/	↗
2	↳	b	↳	∠	A	B	↳	↳	↳	↳	↳
3	↻	c	↻	↻	B	C	↻	↻	↻	↻	↻
4	↺	d	↺	↺	C	D	↺	↺	↺	↺	↺
5	↺	e	↺	↺	D	E	↺	↺	↺	↺	↺
6	↺	f	↺	↺	E	F	↺	↺	↺	↺	↺
7	↗	g	↗	↗	F	G	↗	↗	↗	↗	↗
8	↺	h	↺	↺	G	H	↺	↺	↺	↺	↺
9	↺	i	↺	↺	H	J	↺	↺	↺	↺	↺
↊	↺	j	↺	↺	J/	K	↺	↺	↺	↺	↺
↋	↺	k	↺	↺	K/	L	↺	↺	↺	↺	↺

Z = zero
M = middle/twelve

*1022 'Les deux Arithmétiques'

	Duodecimal Society of Gt. Britain	Duodecimal Society of America	Rodiviwus	Sir Isaac Pitman	Shaun Ferguson
1	one	one	one	one	un
2	two	two	two	two	du
3	three	three	three	three	tri
4	four	four	four	four	che
5	five	five	five	five	pen
6	six	six	six	six	se
7	seven	seven	seven	seven	voi
8	eight	eight	eight	eight	kai
9	nine	nine	nine	nine	nov
ᘔ	ten	dek	deci	ten	dek
ᘓ	eleven	el	alif	eleven	elv
10	dozen	do	tan	dozen	das
11	one dozen one	do one	monotan	onezen and one	das-un
12	one dozen two	do two	duotan	onezen and two	das-du
20	two dozen	two do	twenta	twozen	dudas
21	two dozen one	two do one	twenta one	twozen and one	dudas-un
22	two dozen two	two do two	twenta two	twozen and two	dudas-du
30	three dozen	three do	thirta	threezen	tridas
40	four dozen	four do	fourta	fourzen	chetas
50	five dozen	five do	fifta	fivezen	pendas
60	six dozen	six do	sixta	sixzen	setas
70	seven dozen	seven do	seventa	sevenzen	voitas
80	eight dozen	eight do	eighta	eightzen	kaitas
90	nine dozen	nine do	nineta	ninezen	novas
ᘔ0	ten dozen	dek do	decita	tenzen	dekas
ᘓ0	eleven dozen	el do	alifta	levzen	elvas
100	gross	gro	candred	gross	sad
200	two gross	two gro	two candred	two gross	dusad
10^3	meg	mo	dozend	triple	dren
10^4	dozen meg	do-mo	tandozend	dozen of triple	dasdren
10^5	gross meg	gro-mo		gross of triple	saddren
10^6	miliad	bi-mo	zilion	miliad	miliad

	French Jean Essig	Italian Edoardo Buda	German Heinrich Teitze	Esperanto Dd. S.A.	Interlingua
1	un	uno	eins	unu	un
2	deux	due	zwei	du	du
3	trois	tre	drei	tri	tres
4	quatre	quattro	vier	kvar	quatro
5	cinq	cinque	fünf	kvin	cinque
6	six	sei	sechs	ses	sex
7	sept	sette	sieben	sep	septe
8	huit	otto	acht	ok	octo
9	neuf	nove	neun	naŭ	novo
↊	dix	ame	zehn/kappa	dek	dece
↋	onze	beni	elf/lambda	elf	unze
10	douze	dieci	zwölf/jar	doz	doze
11	douze-et-un	undici	jar-eins	doz unu	doze-un
12	douze-deux	dodici	jar-zwei	doz du	doze-du
20	dante	venti	zwei jar	dudoz	duodoze
21	dante-et-un	ventuno	zwei jar eins	dudoz unu	duodoze-un
22	dante-deux	ventidue	zwei jar zwei	dudoz du	duodoze-du
30	trésante	trenta	drei jar	tridoz	tresdoze
40	tétrante	quaranta	vier jar	kvardoz	quatrodoze
50	pentante	cinquanta	fünf jar	kvindoz	cinquedoze
60	hexante	sessanta	sechs jar	sesdoz	sexdoze
70	heptante	settanta	sieben jar	sepdoz	septedoze
80	ottante	ottanta	acht jar	okdoz	octodoze
90	nonante	novanta	neun jar	naŭdoz	novedoze
↊0	décante	amanta	kappa jar	dekdoz	decedoze
↋0	ondécante	benanta	lambda jar	elfdoz	unzedoze
100	cent	cento	jar-Quadrat	groz	grancento
200	deux cent	duecento	zwei jar-Quadrat	du groz	duo grancento
10^3	mille	mille		moz	granmille
10^4	douze mille	diecimila		do-moz	doze granmille
10^5	cent mille	centomila		gro-moz	grancento granmille
10^6	million	milione		Bi-moz	milliardo

New Notation and Names

Zonnomie A.D. Garnier	D.A. George	Consovocalic L.C. Seelbach			Kingsland Camp English letters			Russian letters		R.J. Hinton	D.A. Sparrow
0	di	zu	Z/S	-u	Noh	N	o	Н	о	naught	
1 pó	on	tu	T/D		neh		e		э	un	une
2 bò	tu	nu	N		nee		i		и	dee	dau
3 cé (ké)	ri	mu	M		nah		a		а	rez	driz
4 gè (guè)	ka	ru	R		noo		u		у	quot	quod
5 tá	fe	vu	V/F		nee-ah		ia		я	quin	kin
6 dà	si	shu	Sh		nee-eh		ie		е	cha	tan
7 fu	poi	ju	J/Y		nee-oh		io		ё	kee	sen
8 vou	ge	gu	G		nai		ai		а	het	gan
9 chin	lai	pu	P		noi		oi		о	nev	noan
ƨ jan	vi	ku	K/Q		nau		au		ау	bow	dix
ς sun	sho	lu	L		niu		iu		ю	gan	lev
10 zon/pló	den	do		-o	Do	D	o	Д	/To	dek	zen
11 plópó	ner-on	dotu			day		e		э	unty un	zenune
12 plóbò	ner-tu	donu			dee		i		и	unty dee	Zendau
20 blò	tul	notu			Mo	M	o	М	о	decty	dauzen
21 blòpó	tul-on	nonu			me		e		э	decty un	dauzen une
22 blòbò	tul-tu	nomu			mi		i		и	decty dee	dauzen dau
30 clé	ren	mo			Fo	F			ф	rezty	drizzen
40 glé	kar	ro			So	S/Z			С/З	quotty	quodzen
50 tlà	fel	vo			Ro	R/L			Р/Л	quinty	kinzen
60 dlà	sin	sho			Bo	B/P			Б/П	chaty	tanzen
70 flu	por	jo			Ko	K			К	keety	senzen
80 vlou	gel	go			Sho	Sh			Ш	hetty	ganzen
90 chlin	lar	po			Jo	J/Ch			Ч	nevty	noanzen
ƨ0 jlan	vir	ko			Vo	V			В	bowty	dixzen
ς0 slun	shol	lo			Go	G			Г	ganty	levzen
100 pró mópre		ti		-i						kent	gross
200 brŏ		ni								deekent	daugross
10^3 mécre		te		-e						fil	zengross
10^4 mègre		ta		-a						dekfil	
10^5 mátre										kentfil	
10^6 màdre										lin	

A SET OF SYMBOLS TO FACILITATE THE MATHEMATICS AND PRACTICE OF DOZENS

by R.J. Hinton

Offprint No.8

Note 1: This article does not necessarily reflect official attitudes of the Society and opinions expressed are the author's own.

Note 2: Although we normally welcome reproduction of articles in the 'Duodecimal Newscast', preferably with due acknowledgements, the author of the following article wishes to retain the copyright. No reproduction of it may be made without reference to him through the Society.

Please read this through from beginning to end, slowly and absorbently so that you may understand it thoroughly from the outset. It is quite sensible and logical.

This presents a NEW and original Set of Symbols, each new in name and design, to clearly distinguish them from arabics and to enable their unconfused use together. Moreover each symbol shows its value: and is clearly readable sideways or upside-down. They are easy to write: and are of worldwide international application because they can be taught by dot-picture and sound name by an instructor ignorant of the pupils' language: standard pronunciation could be taught from recordings.

The symbols were designed to combine the practical merits of the dozen with the mathematical facilities of arabics, zero and "place", and in as simple and systematic a way as seemed possible. They were thought-out with little previous knowledge of others' work on duodecimal, so it was found they clash a little over their name DEKALS. Nevertheless the author persists in the view that the name "decimal" and therefore "dek" more suggest the first use in a series of the zero with unity, than they do the amount X. So again, will the reader set aside all prejudice while he reads quietly, orderly and receptively through this train of thought and reasoning, and then see if the many advantages outweigh this one matter .... and all other disadvantages.

It is considered best to go back to first principles and visually consider each name with the amount it represents, i.e. "think in the language" of "dots and new name" and thus open in the mind a fresh train of thought which can run clear and parallel with all previously acquired knowledge of numbers.

The names are single-syllable, short and snappy and as distinct from each other as devisable; meaningful where possible; and where not, with some "silly synonym" to fix them in the mind.

A set of symbols

	UN	DEE	REZ
Source of name =	universal	duo (L) deux(F)	tres(L&F)

Small circle with tail to represent UN = •

QUOT	QUIN	CHA

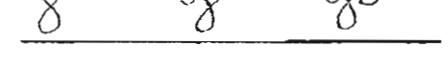
"Cha-Cha" is a modern phrase like "Dekal", so a half-Dek could be "Cha".

Source of name = quattuor(L) Quinque(L) Sound

A straight line is brought in to represent rez small circles and the necessary extra small circle(s) attached.

KEE	HET	NEV
Sound	dialect	Novo(L)

Kee. Seven is "the perfect number", and so perhaps the "key to heaven".



BOW	GAN	DEK

Now come the exceptions that "prove the rule":-

If NOW were "rez lines and un circle" it would be too like GAN so something else, to fit the name is used:

And UN is considered better to stand up straight and alone like "one" has always done:

These Dekal symbols were designed for cursive writing and should be learned so:-

In type, perhaps a "solid" could replace the "circle" e.g. ↊ ↋ ↉

The whole series can be made up in the same way as decimals are:

LIN	↉ 000 000	
KENTFIL	↉ 00 000	
DEKFIL	↉ 0 000	
FIL	↉ 000	= 1728
KENT	↉00	= 144
DEK	↉0	= 12
UN	↉	= 1
doki-	.↉	"point un"
kenti-	.0↉	"point naught un"
fili-	.00↉	
dekfili-	.000↉	
kentfili-	.0000↉	
lini-	.00000↉	

"Standard Units" by omitting plural "s".

Accent "i-" as sound "i" (and NOT "e") to avoid confusion such as occurs with badly spoken decimals.

For the "Doks" "-ty" is added to the symbol name, starting at "un-" for consistency, although "-teen" could be used in these Islands to maintain tradition,
and followed by the "unit figure where required:-

unty un	unty cha	Rezty kee	Bowty gan
↉↉	↉↊	↋↊	ↈ↋

unty	deety	rezty	quotty	quinty	chaty	keety	hetty	nevty	bowty	ganty
↉0	↋0	↋0	60	↊0	↊0	↊0	↊0	↊0	↉0	↉↉0

Kent
↉00

When the reader has written these symbols a few times while saying their names and seeing their values, the working of calculations will be quite easy to one who has coped with duodecimals by other symbols.

"Weights and measures etc." can also be tied together like the metric system. The author, endeavouring to be practical, takes the English "Yard" as the base, since it is a length which most people can judge as "an arm's length to the nose" (held at the necessary angle to suit the individual's reach). Whatever scientific "base" is taken, it is sure to be awkward for one reason or another, and sure to be found inaccurate by later measurements like the metre is. So let us use something arbitrary that has been found practical down through the ages, i.e. the 36 inch "yard".

A set of symbols

Make single syllable names again e.g.

36" = ARD ∴ square ard = ARAL
3" = deki-ard ∴ cubic deki-ard = BOWD = HYNT
of water @ 4°C (.933lb) (15.57 fl.oz)
about 4/5 pint.
¼" = kenti-ard, .0ƒ Ard
1/48" = fili-ard, .00ƒ Ard
1/12" = quot filiard, .00ℰ Ard
"2 thou" = a dekfiliard, .000ƒ Ard.

For English money take the florin and call it a "Flor" and all our other coins can stay as useful fractions until worn out.

un"merle" = 2d. = ℰ pennies so the merle with its reverse Blackbird need not be minted.

dek merle = un"flor" = 2/-d.
dek flor = un"Gile" = 24/-d.) the only "new" coins required and
cha flor = half Gile= 12/-d.) they can be paper like £1 and 10/-d.

½d.	= .0ℰ	Flor	
1d.	= .0ℭ	"	
2d.	= .ƒ	"	= a dekiflor
6d.	= .ℰ	"	= a quarter flor
1/-d.	= .ℭ	"	= a half flor
2/6d.	= ƒ.ℰ	"	
10/-d.	= quin ℰ	"	
£1	= bow ƒ	"	

Conversion from Arabics to Dekals and vice versa can be "done in the head" below a gross (if you know your "twelve times!")
e.g. 63 is 5 dozen and three, quinty rez ℭℰ
47 is one under 4 dozen, rezty gan ℰ ıƒ
unty rez ƒℰ is one dozen and three, 12 + 3 = 15
keety quot ℵ6 is 7 dozen and four, 84 + 4 = 88
hetty quot ℵ6 is 8 dozen and four, 96 + 4 = 100
55 is 4 dozen and seven, quotty kee 6ℵ

A SUGGESTED SERIES OF NOTATION AND NAMES

by D.A. Sparrow

Offprint No.9

First of all, the difficulties to overcome.

A system of new notation must be different from Roman and Arabic (or Hindu) numerals so that there can be no possibility of confusion, and yet be easy and fluent to write, suggest a quantity or amount immediately without undue consideration.

Where possible, a number is suggested by a point, angle or circle -- three points being shown by a straight line. In a "place" system, a zero is always necessary and this has been "0" for a long time. I see no reason for alteration.

One has been a straight line for a long time; but this must be changed as .1 would no longer by the same quantity, that is it will change from 1/2 to 1/10 -- also 11 could be two (Roman) or eleven (decimal). One angle (a point or circle is confusing) is necessary: .....

Two would be points joined together ..... 

As a line is not possible, we must have three points joined, and, in order to distinguish it from 3, put backward ..... 

A line and a circle for four ..... 

A line, angle, and point or circle for five .....

Two lines, to be joined must make an angle  and so seven would be two lines and a circle .....

Two lines, a circle and an angle could be .....

Nine as three lines might confuse with other symbols, and therefore a point, a line, an angle, another line and a circle .... 

Ten was rather awkward, but if we take the Roman figure joined together, it might be considered three lines with an angle in the middle .....

Eleven can be considered either the Arabic figure joined together or three lines and two angles .....

For the names, we want some suggestion of quantity and yet sufficiently different from our present names to avoid confusion. Here, I think, those with better linguistic abilities than myself could probably offer better suggestions. The suggestion with derivation, if any, follows:

⟨	UNE	French for feminine one.
⊃	DAU	from double.
ℰ	DRIZ	
⌀	QUOD	quadrangle.
ζ	KIN	
⋀	TAN	sixpence.
⋌	SEN	shortened Arabic seven.
⋁	GAN	shortened gallon.
ℒ	NOAN	This cannot be spelt NONE (pronounced "known" for that could easily be confusing, although pronounced differently.
⋉	DIX	French spelling -- English pronunciation. We can only hope it will not confuse with Richard's ten!!
⋈	LEV	shortened Arabic eleven.
⟨0	DEN	I thought this the best shortened form of Dozen I do not think we want any DOS (or Don'ts). DUZ sounds like "does". DOZE is too lethargic or sleepy. Since reading "New Numbers", I see that Andrews suggests ZEN, which might be better in case someone had a cold, and it was mistaken for ⋉

I have never been in favour of "-teen" or "-ty"; or "-zeen" and "-zy" as this would be. In other words, having a perfectly good word for⟨0 let us make use of it in a proper manner i.e.

⟨⟨ = ZENUNE ⟨⋉ ZENDIX, etc. Also ⊃0 = DAUZEN and
ℒ0 = SENZEN.
For⟨00 -- a gross. Why cannot⟨000 be a ZENGROSS?

We could then reach 10 000 before thinking of a new name. As there are already many puns in the English language, one or two more will not hurt as long as they do not suggest a different quantity.

I	1	One		UN	UNE
II	2	Two		DEE	DAU
III	3	Three		REZ	DRIZ
IV	4	Four		QUOT	QUOD
V	5	Five		QUIN	KIN
VI	6	Six		CHA	TAN
VII	7	Seven		KEE	SEN
VIII	8	Eight		HET	GAN
IX	9	Nine		NEV	NOAN
X	10	Ten		BOW	DIX
XI	11	Eleven		GAN	LEV
XII	12	Twelve		DEK	ZEN
XIII	13	Thirteen		UNTYUN	ZENUNE
XIV	14	Fourteen		UNTYDEE	ZENDAU
				REZTEEN etc.	
XV	15	Fiften		UNTYREZ	ZENDRIZ
XVI	16	Sixteen		UNTYQUOD	ZENQUOD
XVII	17	Seventeen		UNTYQUIN	ZENKIN
XVIII	18	Eighteen		UNTYCHA	ZENTAN
XIX	19	Nineteen		UNTYKEE	ZENSEN
XX	20	Twenty		UNTYHET	ZENGAN
XXX	30	Thirty		UNTYNEV	ZENNOAN
XL	40	Forty		UNTYBOW	ZENDIX
L	50	Fifty		UNTYGAN	ZENLEV
LX	60	Sixty		DEE	DAUZEN
LXX	70	Seventy		REZTY	DRIZZEN
LXXX	80	Eighty		QUOTTY	QUODZEN
XC	90	Ninety		QUINTY	KINZEN
C	100	Hundred		CHATY	TANZEN
D	500	Five hundred		KEETY	SENZEN
M	1000	Thousand		HETTY	GANZEN
				NEVTY	NOANZEN
				BOWTY	DIXZEN
				GANTY	LEVZEN
				KENT	GROSS
				FIL	ZENGROSS

It is unfortunate that these are alike, but so are "seventy" and "seventeen".

O B I T U A R Y — Frederick John Binder

We have just heard of the sudden death last February of Mr. F. J. Binder at the age of 62.

Mr. Binder, a retired Civil Servant, joined our Society after reading a letter in 'The Times'. His dozenal interest was in practical everyday applications, and in this he was well qualified to speak, having a small business which he kept an eye on. He once said, "I have come into contact with people of all classes and it seems to me that over half the population do very little counting at all except to count their wages, their shopping items and their change — it's the pence in the shilling they are interested in rather than units and tens. Of the others, many are engaged in packing articles in dozens, half dozens and 'threes' and checking them."

He was also a keen member of the British-Israel World Federation and was well read in moral and religious matters. Here again, he took the practical, modern viewpoint, objecting to sectarian dogmatisms, and willing to accede only to what could be defended by a reasonable interpretation of the Bible.

We sympathise with Mrs. Binder, to whom a letter of condolence has been sent.

Quotations from F. J. B I N D E R

A number of British Israelites have, for many years, been struck with the close association of the number 'twelve' with the customs and practices of the Anglo-Saxon peoples and have wondered whether it represented yet another item of evidence in support of their religious theory. This is that our race has been marked out by Providence in peculiar ways as distinct from all others, thus testifying to the old prophecies of Israel being a 'peculiar' people. The number 'twelve' represents the number of tribes from which it is claimed that our race has descended (mostly ten of them) and also an association with the twelve apostles, etc.

The attempt to get the old British florin adopted as some sort of unit for the decimal system of coinage by calling it "one tenth of a pound" by means of the Victorian 'godless florin' (with the words "Dei gratia" omitted) failed.

E R R A T A to Duodecimal Newscast Year 3, No.1, May 1175

page 7 para 3 line 1 for for read far
5 for both read bother
10 table II 100 ell = £528'
12 line 4 for Views read Verse
5 delete Verse

D U O D E C I M A L S I N T H E B R I T I S H P R E S S

'Duodecimal and Duodecimal' (Prof. Aitken) THE GUARDIAN	14 May
correspondence	26 May
Prof. Aitken's reply	23 June
Letter BATH AND WILTS EVENING CHRONICLE (D. A. Sparrow)	15 June

M E M B E R S H I P

New Younger Member

G.R. Henderson c/o Meikle, 13 Argyle Place, Edinburgh, 9.

Life Members

D.A. Sparrow 1, Oolite Grove, Odd Down, Bath

H.E. Hallwright "Lowlands", 4387 Majestic Drive, Victoria, B.C., Canada

have changed from Ordinary Members to Life Members

D U O D E C I M A L P U B L I C A T I O N S, etc.

The following publications are strongly recommended. All are available through the Society, packing and inland postage a penny in the shilling extra. Those marked ø are available through shops.

Logical Money, Weights and Measures	free
Duodecimal Leaflet	free
Duodecimal Newscasts for *1173	;6d
" " for *1174 and 1175	1s;0d
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