`BOA, Y.MTV. 1/6, 1/9, 1/10, 1/11` (1877 / AH 1294) Original Sublime Porte Cipher Keys — Complete Edition

Comparative Critical Edition of the Russo-Ottoman War of 1877–1878 (93 Harbi) Sublime Porte Two-Digit Letter Tables (3 × 58/81 = 174 Cells) and Zero-Free Three-Digit Code Vocabularies · Prepared: 18 November 2026

3 × 58 / 81	23 / 81	29 × 2	0% Zeroes	4 Folders	6 Plates
deciphered 1877 letter tables	unassigned codes per table	fixed homophones per letter	digit 0 in Parts I & II	Y.MTV. 1/6, 1/9, 1/10, 1/11	original archival facsimiles

1. Comparative Architectural Overview and the 58 / 81 Design Law

All three original 1877 Sublime Porte two-digit cipher tables preserved in the Ottoman Archives' Yıldız Palace Miscellaneous Submissions collection (*Yıldız Mütenevvi Maruzat*, `Y.MTV. File 1: 1/6, 1/9, 1/10`) have been read cell by cell, proving that **all three populate exactly 58 numbers (29 Ottoman letters × 2 homophones) out of the 81-code zero-free pool (`11–99`) while leaving exactly 23 numbers unassigned**. This structural law conclusively corroborates that the 10 two-digit numbers absent across 2,515 cipher groups in the May 1293 (May 1877) *Umûm Vilâyât* key were likewise left intentionally unassigned when that cipher book was compiled.

Archival Reference	Hijri / Gregorian Date	Assigned	Unassigned	Homophone Rule	Part II (Three-Digit Vocabulary)
DH.ŞFR. 109/1–15 (Reconstruction)	Rûmî May 1293 / May 1877	**71 / 81**	**10 / 81**	29 letters (1–6 homophones) + ده, نك	Zero-free `111–999` (17 codes attested)
BOA, Y.MTV. 1/6 (Original)	29 Jumâdâ I 1294 / 11 June 1877	**58 / 81**	**23 / 81**	29 letters × 2 homophones	None (pure 2-digit table)
BOA, Y.MTV. 1/9 (Original)	15 Ramadân 1294 / 23 September 1877	**58 / 81**	**23 / 81**	29 letters × 2 homophones	Zero-free `118–988` (2-page complete vocabulary)
BOA, Y.MTV. 1/10 (Original)	7 Dhu'l-Hijja 1294 / 13 December 1877	**58 / 81**	**23 / 81**	29 letters × 2 homophones	Zero-free `255–956+` (5-page complete vocabulary)
BOA, Y.MTV. 1/11 (Original)	17 Muharram 1295 / 21 January 1878	—	—	Lexical codebook only	Alphabetical حرف الالف–حرف الياء codebook

2. BOA, Y.MTV. 1/6 (29 Jumâdâ I 1294 / 11 June 1877) — Complete 58 / 81 Edition

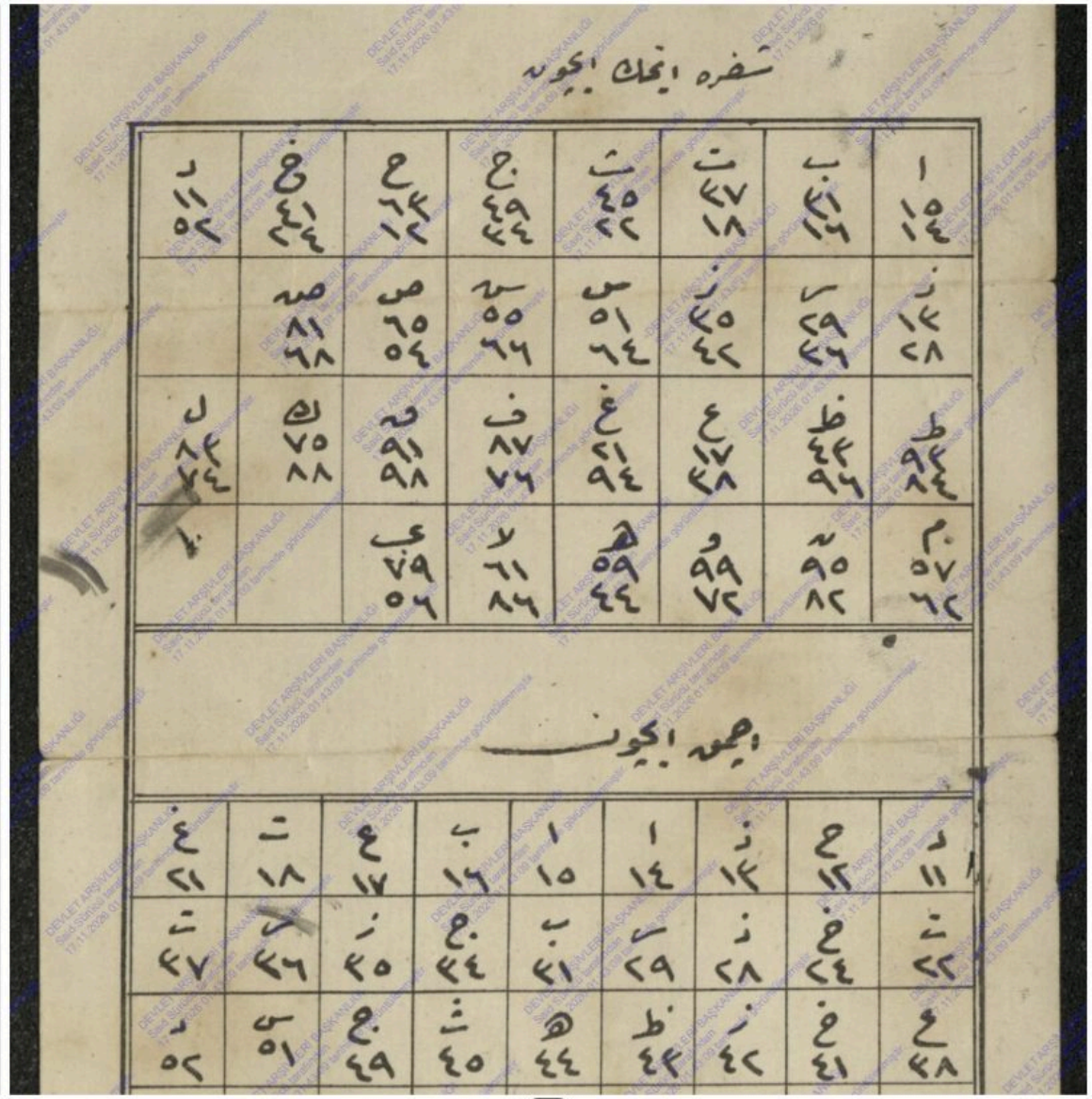
Carrying both the *“For Enciphering”* (*«Şifre etmek içün»*, شفره ايتمك ايچون) and *“For Deciphering”* (*«Açmak içün»*, اچمق ايچون) tables on a single folio, this key is verified at **58 / 58 with zero ambiguity** through direct cross-checking of the two tables. **Unassigned 23 codes:** `19, 23, 25, 26, 27, 32, 33, 39, 46, 47, 48, 53, 58, 67, 69, 71, 73, 77, 78, 85, 89, 92, 97`.

	1	2	3	4	5	6	7	8	9
1·	11 د	12 ح	13 ذ	14 ا	15 ا	16 ب	17 ع	18 ت	19 —
2·	21 غ	22 ث	23 —	24 خ	25 —	26 —	27 —	28 ذ	29 ر
3·	31 ب	32 —	33 —	34 ج	35 ز	36 ر	37 ت	38 ع	39 —
4·	41 خ	42 ز	43 ظ	44 ق	45 ث	46 —	47 —	48 —	49 ج
5·	51 س	52 د	53 —	54 ص	55 ش	56 ى	57 م	58 —	59 ق
6·	61 لا	62 م	63 ح	64 س	65 ص	66 ش	67 —	68 ض	69 —
7·	71 —	72 و	73 —	74 ل	75 ك	76 ف	77 —	78 —	79 ى
8·	81 ض	82 ن	83 ل	84 ط	85 —	86 لا	87 ف	88 ك	89 —
9·	91 ه	92 —	93 ط	94 غ	95 ن	96 ظ	97 —	98 ه	99 و

2.1 Y.MTV. 1/6 Enciphering Table (29 Letters × 2 Homophones)

Letter	Codes	Letter	Codes	Letter	Codes
ا	`14, 15`	ب	`16, 31`	ت	`18, 37`
ث	`22, 45`	ج	`34, 49`	ح	`12, 63`
خ	`24, 41`	د	`11, 52`	ذ	`13, 28`
ر	`29, 36`	ز	`35, 42`	س	`51, 64`
ش	`55, 66`	ص	`54, 65`	ض	`68, 81`
ط	`84, 93`	ظ	`43, 96`	ع	`17, 38`
غ	`21, 94`	ف	`76, 87`	ق	`44, 59`
ك	`75, 88`	ل	`74, 83`	م	`57, 62`
ن	`82, 95`	و	`72, 99`	ه	`91, 98`

Letter	Codes	Letter	Codes	Letter	Codes
لا	61, 86	ى	56, 79	—	—



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Plate A · BOA, Y.MTV. 1/6 (29 Jumâdâ I 1294 / 11 June 1877) — Top: «شفره ايتمك ايچون» (“For Enciphering”: 29 letters × 2 homophones = 58 codes; final 3 boxes blank); bottom: «اچمق ايچون» (“For Deciphering”: sequential 11–99 decoding grid).

3. BOA, Y.MTV. 1/9 (15 Ramadân 1294 / 23 September 1877) — Complete 58 / 81 Edition and Part II Vocabulary

This document is the direct structural twin of the May 1293 *Umûm Vilâyât* cipher book: at the top stands the 29-letter two-digit table (**58 assigned, 23 unassigned codes**: `18, 32, 33, 35, 36, 37, 38, 46, 47, 48, 53, 58, 63, 69, 73, 77, 78, 81, 83, 84, 85, 89, 97`), while below it appears the **zero-free three-digit code vocabulary** running from `118` = ارادہ سنیہ through `988`.

	1	2	3	4	5	6	7	8	9
1·	11 ك	12 ق	13 ض	14 خ	15 ط	16 ط	17 ذ	18 —	19 ح
2·	21 ظ	22 غ	23 ك	24 ف	25 م	26 ا	27 غ	28 ذ	29 ن
3·	31 ل	32 —	33 —	34 ظ	35 —	36 —	37 —	38 —	39 ض
4·	41 ر	42 ن	43 د	44 ث	45 ع	46 —	47 —	48 —	49 ق
5·	51 ه	52 ل	53 —	54 ب	55 و	56 ع	57 ا	58 —	59 ث
6·	61 ج	62 م	63 —	64 و	65 ی	66 ه	67 ف	68 ی	69 —
7·	71 س	72 ت	73 —	74 ص	75 ش	76 ز	77 —	78 —	79 ح
8·	81 —	82 ص	83 —	84 —	85 —	86 ج	87 ز	88 ش	89 —
9·	91 لا	92 خ	93 س	94 ر	95 ب	96 د	97 —	98 لا	99 ت

3.1 Y.MTV. 1/9 Enciphering Table (29 Letters × 2 Homophones)

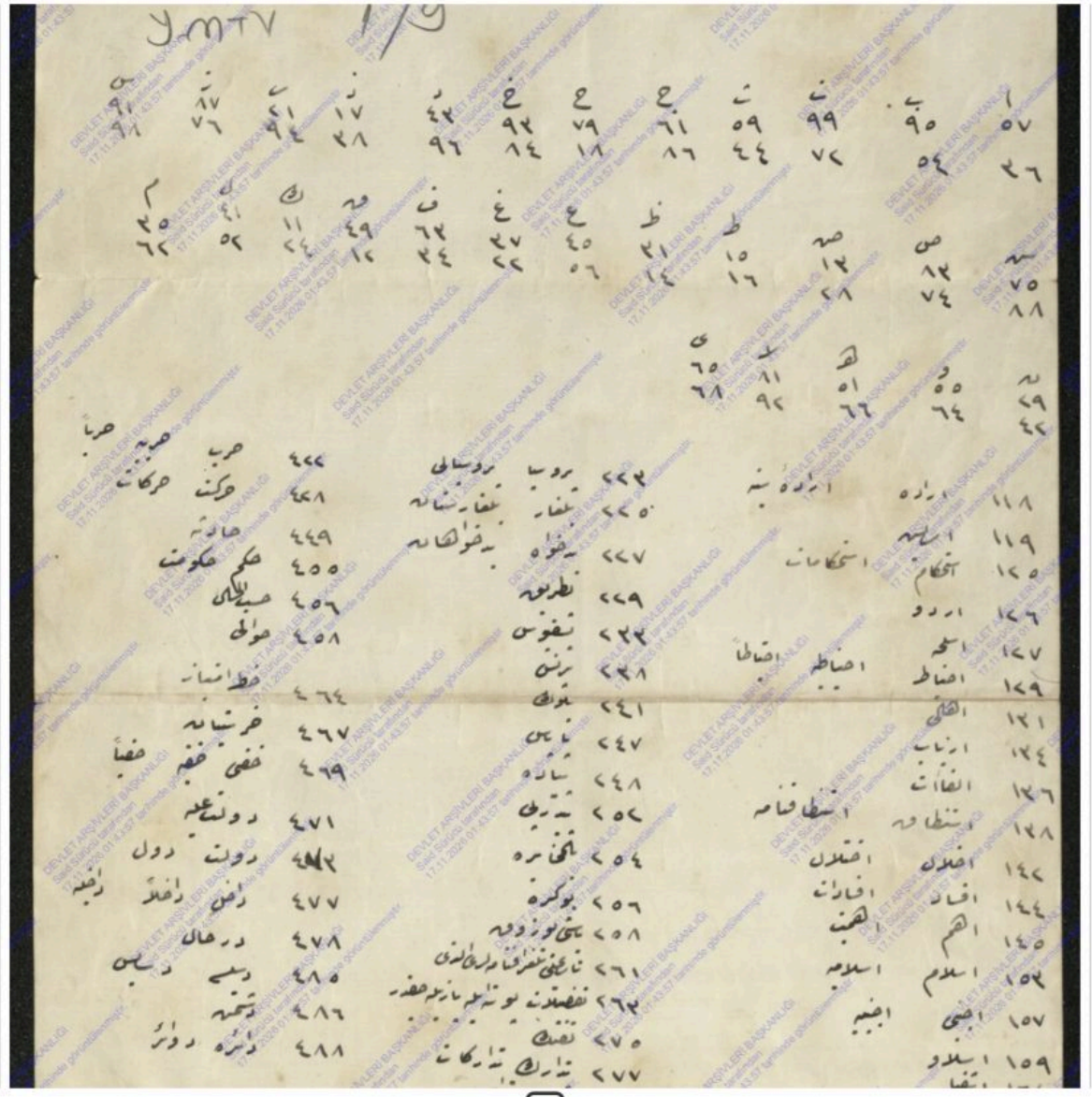
Letter	Codes	Letter	Codes	Letter	Codes
ا	`26, 57`	ب	`54, 95`	ت	`72, 99`
ث	`44, 59`	ج	`61, 86`	ح	`19, 79`
خ	`14, 92`	د	`43, 96`	ذ	`17, 28`
ر	`41, 94`	ز	`76, 87`	س	`71, 93`
ش	`75, 88`	ص	`74, 82`	ض	`13, 39`
ط	`15, 16`	ظ	`21, 34`	ع	`45, 56`
غ	`22, 27`	ف	`24, 67`	ق	`12, 49`
ك	`11, 23`	ل	`31, 52`	م	`25, 62`
ن	`29, 42`	و	`55, 64`	ه	`51, 66`

Letter	Codes	Letter	Codes	Letter	Codes
لا	91, 98	ی	65, 68	—	—

3.2 Selected Entries from the Y.MTV. 1/9 Zero-Free Three-Digit Part II Vocabulary (pp. 1–2)

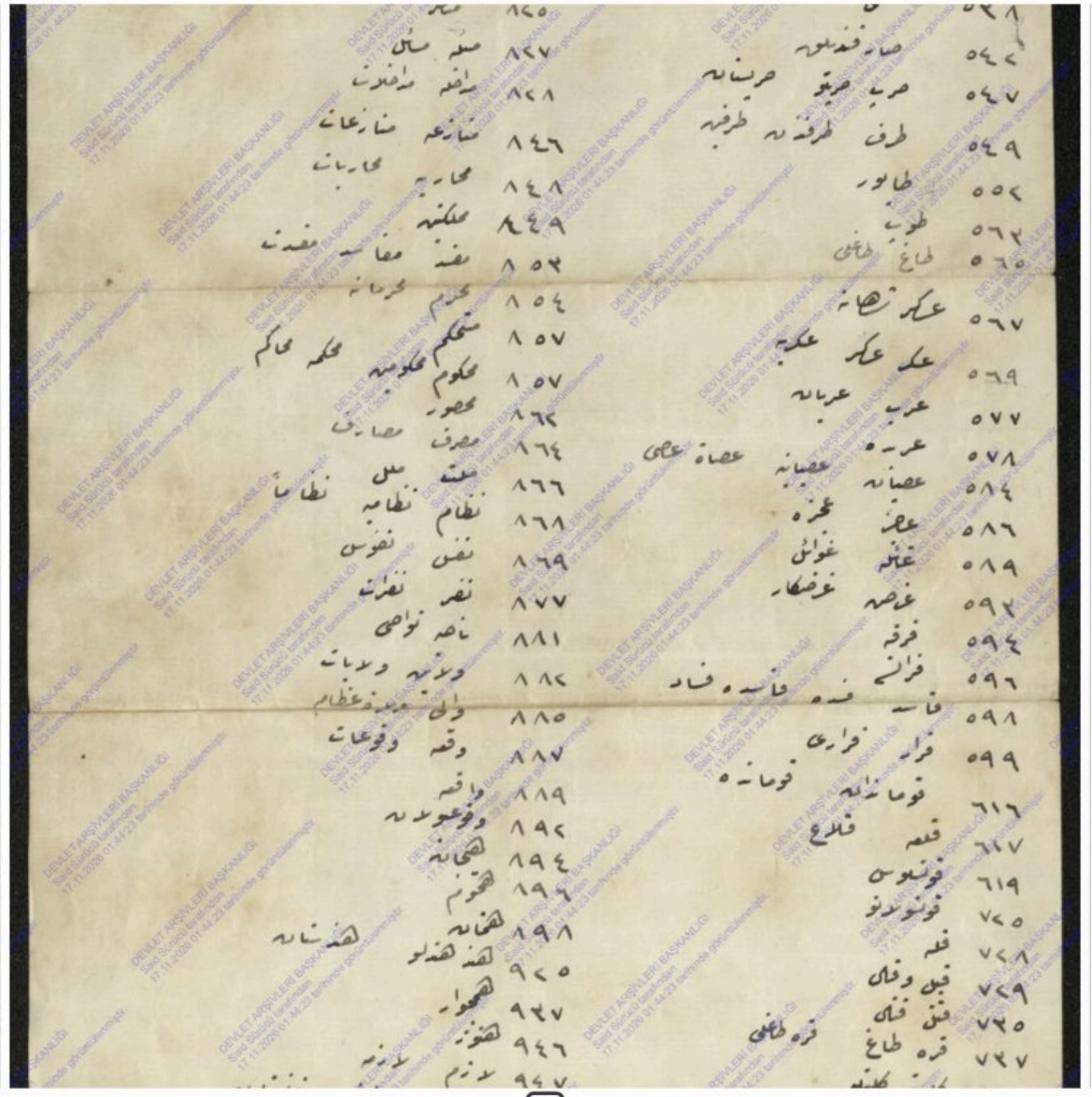
Code	Ottoman Entry	Ottoman Reading	May 1293 Parallel / Structural Note
118	اراده / اراده سنیه	irâde / irâde-i seniyye	—
119	استحکام / استحکامات	istihkâm / istihkâmât	—
125	انتظام	intizâm	—
126	اردو	ordu	—
127	اسلحه	esliha	—
129	انضباط / انضباطیه	inzibât	—
131	اهالی	ahâlî	—
136	افغان	Afgân	—
138	انتظار / انتظارده	intizâr	—
142	اختلال	ihtilâl	—
152	اسلام / اسلامیه	İslâm / İslâmiyye	—
157	اجنبی / اجنبیه	ecnebî / ecnebiyye	—
175	انکلتره / انکلتره لو	İngiltere	—
182	ایتالیا	İtalya	—
184	اوسترییا / اوستریالو	Avusturya	—
185	ایران / ایرانی	Îrân / Îrânî	May 1293: 224 = ایران
191	ارمنی	Ermenî	—
192	پادشاه / پادشاهی	pâdişâh / pâdişâhî	—
223	روسیه / روسیه لو	Rusya / Rusyalı	—
225	بلغار / بلغارستان	Bulgar / Bulgaristan	—
227	پرتوسته	protesto	—
229	بطریه	batarya	—
233	نفوس	nüfûs	May 1293: 753 = نفوس
238	پاشا	paşa	May 1293: 253 = پاشا
241	بلوك	bölük	—
248	پیاده	piyâde	—
261	تاریخلی تلغرافنامه لرینی	târihli telgrafnâmelerini	May 1293: 295 = تلغرافنامه
277	تدارك / تداركات	tedârik / tedârikât	—
313	جبل	Cebel (Montenegro)	—
346	ضابط / ضابطان	zâbit / zâbitân	—
357	جاسوس	câsûs	—
369	محاربه	muhârebe	—
433	حرب / حربیه	harb / harbiyye	—
438	حرکت / حرکات	hareket / harekât	May 1293: 344 = حرکت
455	حکومت	hükûmet	May 1293: 347 = حکومت

Code	Ottoman Entry	Ottoman Reading	May 1293 Parallel / Structural Note
471	دولت علیه	Devlet-i Aliyye	—
495	ردیف	redîf	—
517	سواری	süvârî	—
522	سلاح	silâh	—
547	صربیه / صربلو	Sırbiye / Sırplı	—
549	طرف / طرفندن / طرفنه	taraf / tarafından / tarafına	May 1293: 548 = طرف (identical numerical zone!)
552	طابور	tabur	May 1293: 549 = طابور؟ / طوپ؟
562	طوپ	top	May 1293: 549 = طابور؟ / طوپ؟
565	طاغ / طاغلی	dağ / dağlı	—
567	عسکر / عساکر نظامیه	asker / asâkir-i nizâmiyye	May 1293: 557 = عساکر
569	عسکر / عساکر ملکیه	asâkir-i mülkiyye	—
578	عصاه / عصیان	usât / isyân	May 1293: 567 = عصیان
594	فرقه	fırka	May 1293: 618 = فرقه
596	فرانسه	Fransa	—
599	قوماندان / قوماندانه	kumandan	—
617	قلعه / قلاع	kal‘a / kılâ‘	—
619	قونسولس	konsolos	—
737	قره طاغ / قره طاغلی	Karadağ / Karadağlı	—
749	مهمات	mühimmât	—
756	مومی الیه	mûmâ-ileyh	May 1293: 672 = †مشارالیه
762	موقع / مواقع	mevki‘ / mevâki‘	—
848	محاربه / محاربات	muhârebe / muhârebât	—
852	مفسد / مفسدت	müfsid / mefsedet	—
866	نظام / نظامیه	nizâm / nizâmiyye	—
869	نفس / نفوس	nefs / nüfûs	May 1293: 753 = نفوس
877	نفر / نفرات	nefer / neferât	—
882	ولایت / ولایات	vilâyet / vilâyât	—
947	لازم	lâzım	—
949	یونان / یونانلو / یونانستان	Yûnân / Yûnânistan	May 1293: 857 = یونان
965	یانینه	Yanya	—
987	یکی	yeni	—



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Plate B · BOA, Y.MTV. 1/9 p. 1 (15 Ramadân 1294 / 23 September 1877) — Top: 29-letter Part I table (58 assigned, 23 unassigned codes); bottom: zero-free 3-digit Part II code vocabulary beginning at 118 = ارادہ سنیہ.



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Plate C · BOA, Y.MTV. 1/9 p. 2 (547 = يونان = 949 … طابور = 552 طرف, = 549 … صربيه) — Second page of the three-digit Part II vocabulary: original archival folio directly documenting the systematic skipping of every zero-containing code (550, 560, 600–610, etc.).

4. BOA, Y.MTV. 1/10 (7 Dhu’l-Hijja 1294 / 13 December 1877) — Complete 58 / 81 Edition and 5-Page Vocabulary

Page 1 of this seven-page cipher key contains the 58-cell sequential deciphering grid (**23 unassigned codes:** `13, 15, 21, 26, 32, 33, 37, 44, 49, 51, 53, 56, 61, 62, 69, 71, 75, 79, 83, 87, 89, 93, 98`), while pages 2–5 contain the **zero-free three-digit code vocabulary** organized under alphabetical rubrics (حرف با، حرف حا، حرف سين، حرف ميم). The 6 cells on the top row (`11, 12, 14, 16, 17, 18`) are conclusively established via bowl/tail paleography together with the exact set of 6 letters (ا، ح، س، ر، ص، و) having only a single homophone among the remaining 52 assigned cells across `19–99`.

	1	2	3	4	5	6	7	8	9
1·	11 ا	12 ح	13 —	14 س	15 —	16 ر	17 ص	18 و	19 ع
2·	21 —	22 ع	23 ب	24 ل	25 غ	26 —	27 ج	28 ق	29 ى
3·	31 ف	32 —	33 —	34 خ	35 ت	36 ف	37 —	38 د	39 ل
4·	41 ث	42 ز	43 ظ	44 —	45 ر	46 لا	47 ط	48 ذ	49 —
5·	51 —	52 ض	53 —	54 ه	55 م	56 —	57 ق	58 ج	59 ز
6·	61 —	62 —	63 ن	64 خ	65 ض	66 ث	67 ذ	68 ى	69 —
7·	71 —	72 ك	73 ه	74 ت	75 —	76 ش	77 و	78 ظ	79 —
8·	81 لا	82 د	83 —	84 ك	85 ش	86 م	87 —	88 ا	89 —
9·	91 ن	92 ب	93 —	94 غ	95 ح	96 ط	97 س	98 —	99 ص

4.1 Y.MTV. 1/10 Enciphering Table (29 Letters × 2 Homophones)

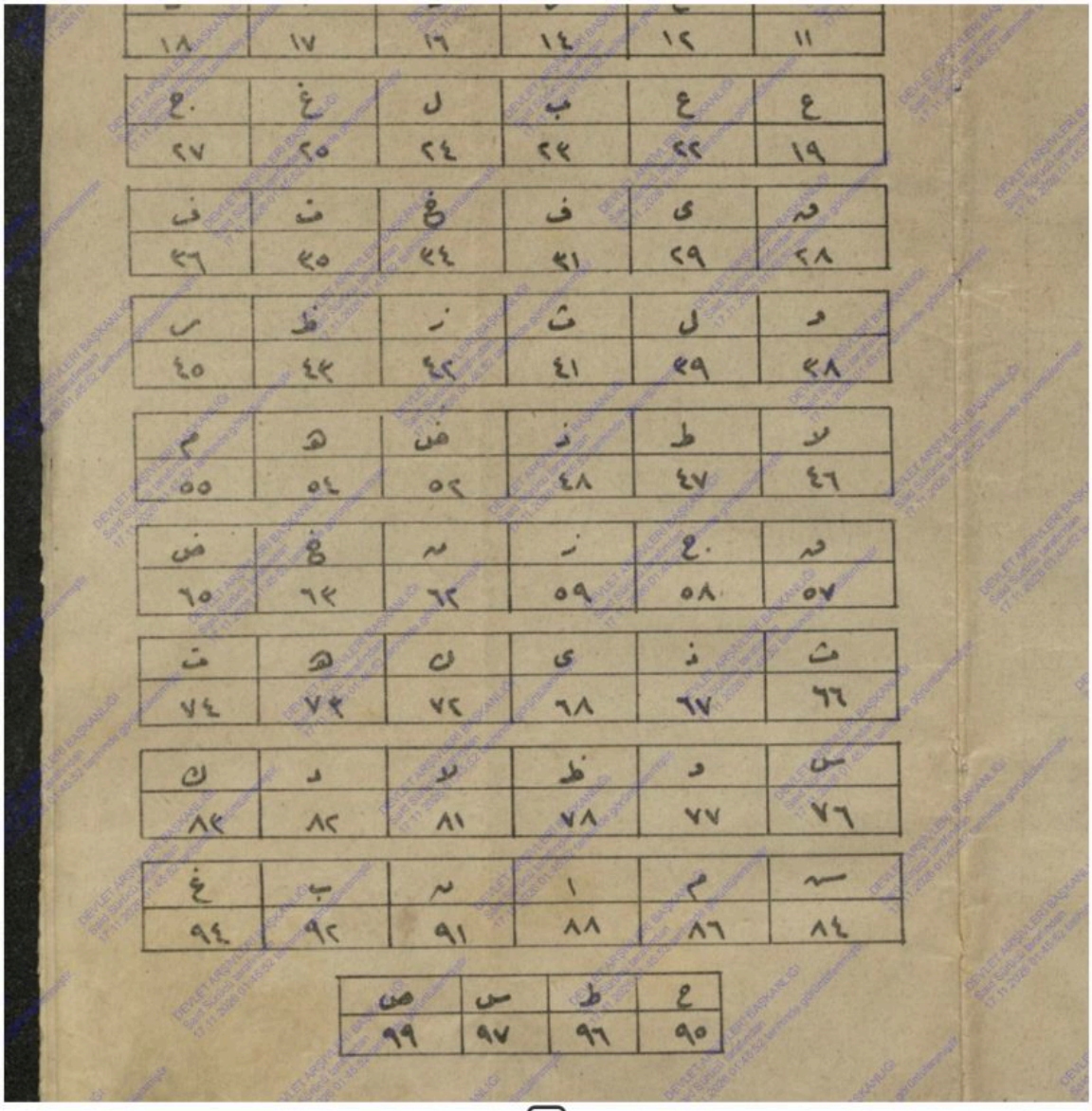
Letter	Codes	Letter	Codes	Letter	Codes
ا	`11, 88`	ب	`23, 92`	ت	`35, 74`
ث	`41, 66`	ج	`27, 58`	ح	`12, 95`
خ	`34, 64`	د	`38, 82`	ذ	`48, 67`
ر	`16, 45`	ز	`42, 59`	س	`14, 97`
ش	`76, 85`	ص	`17, 99`	ض	`52, 65`
ط	`47, 96`	ظ	`43, 78`	ع	`19, 22`
غ	`25, 94`	ف	`31, 36`	ق	`28, 57`
ك	`72, 84`	ل	`24, 39`	م	`55, 86`

Letter	Codes	Letter	Codes	Letter	Codes
ن	63, 91	و	18, 77	ه	54, 73
لا	46, 81	ى	29, 68	—	—

4.2 Selected Entries from the Y.MTV. 1/10 Zero-Free Three-Digit Part II Vocabulary (pp. 2–5)

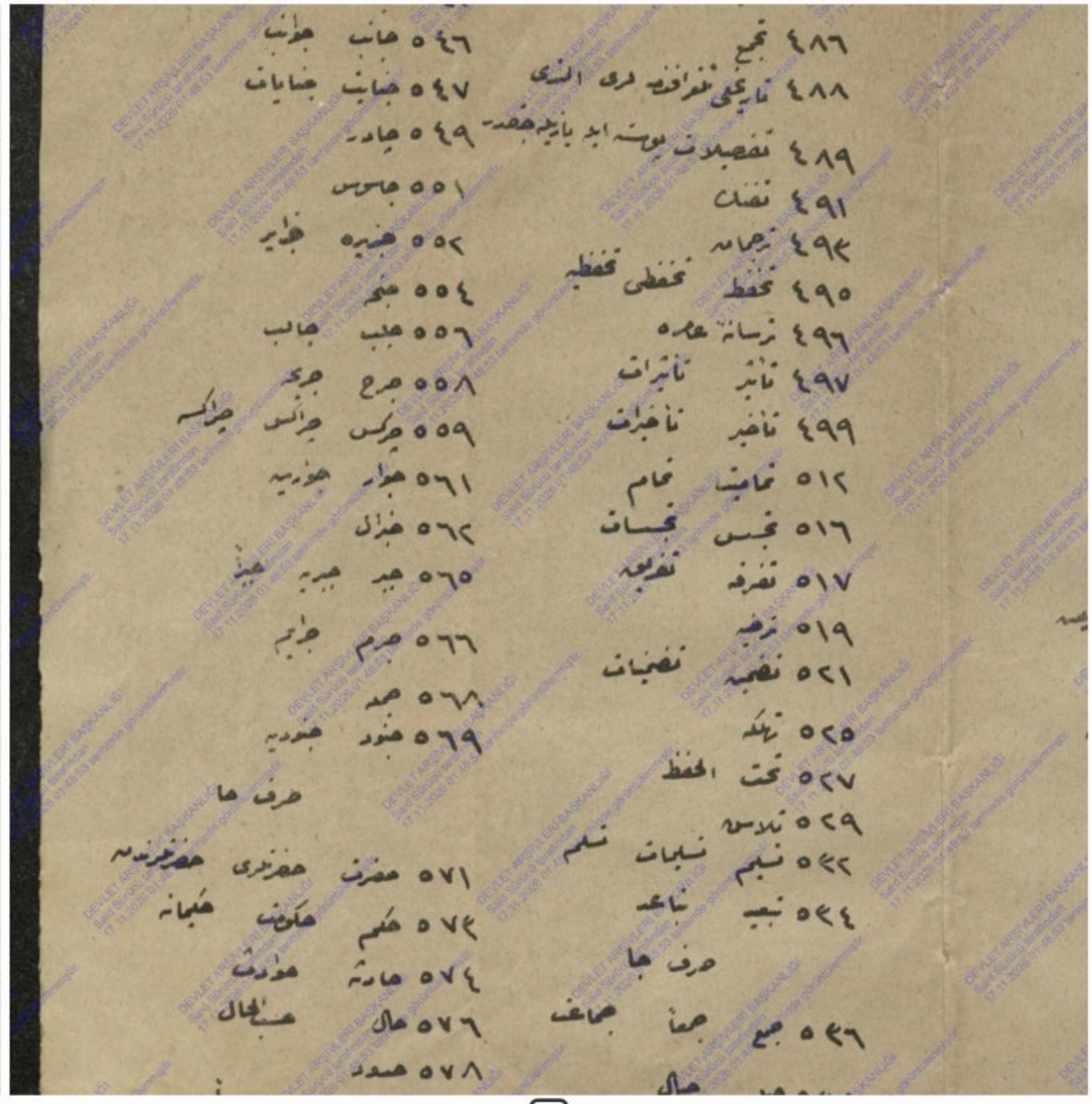
Code	Ottoman Entry	Ottoman Reading	May 1293 Parallel / Structural Note
255	المانيا	Almanya	—
257	افلاق	Eflâk	—
261	ايران	Îrân	May 1293: 224 = ايران
265	اشقودره	İşkodra	—
279	انقره	Ankara	—
282	اولوب	olub	Also corroborated in DH.ŞFR. 110/14
285	اولديغى	olduğu	—
427	اولوجهله	ol-vechile	End of section حرف الف (DH.ŞFR. 110/14 Mio.r6)
431	پادشاه / پادشاهى	pâdişâh / pâdişâhî	Start of section حرف با (430 skipped — zero-free!)
434	پاشا	paşa	May 1293: 253 = پاشا
435	پرنس	prens	DH.ŞFR. 110/14 Mio.r3 (پرنس ميلان)
438	باب عالى	Bâb-ı Âlî	—
441	بلوك	bölük	—
446	باروت	barut	—
449	بطريه	batarya	—
459	پياده	piyâde	—
465	بوسنه	Bosna	DH.ŞFR. 110/14 Mi1.r6–7 (×2: بوسنه يه)
488	تاريخلى تلغرافنامه لرى / ساميلرى	târihli telgrafnâme-i sâmîleri	May 1293: 295 = تلغرافنامه
489	تفصيلات	tafsîlât	—
495	تحفظ / تحفظى / تحفظيه	tahaffuz / tahaffuziyye	—
527	تحت الحفظ	tahtü'l-hıfz	499 → 512 transition (500–510 skipped — zero-free!)
551	جاسوس	câsûs	—
559	چركس / چراكسه	Çerkes / Çerâkise	—
571	حضرتلرى / حضرتلرينك	hazretleri / hazretlerinin	Start of section حرف حا
685	سلطنت سنيه	Saltanat-ı Seniyye	Start of section حرف سين
695	سلاح	silâh	—
697	سوارى	süvârî	—
698	سررشته	serrişte	Collocation «بر سررشته [539=شكايت]» in 109/5
699	سفير / سفرا / سفارت	sefîr / süferâ / sefâret	May 1293: 522 = سفارت (713 → 699 zero-free!)
717	سوق / سوقيات	sevk / sevkiyât	May 1293: 526 = سوق
719	شفره	şifre	Start of section حرف شين
721	ششخانه	şeşhâne	—
728	شكايت / شكايات	şikâyet / şikâyât	May 1293: 539 = شكايت
748	صرب / صربلو	Sırb / Sırplı	Start of section حرف صاد (DH.ŞFR. 110/14 Mio.r2، r6)

Code	Ottoman Entry	Ottoman Reading	May 1293 Parallel / Structural Note
759	صربیه / صربستان	Sırbiye / Sırbistan	—
761	ضبط / ضابط	zabt / zâbit	Start of section حرف ضاد
769	طابور	tabur	Section حرف طا (DH.ŞFR. 110/14 Mio.r3–4: قرق طابورله)
874	قلعه / قلوب	kal‘a / kulûb	—
912	کتب / کتاب	kütüb / kitâb	898 → 911 transition (900–910 skipped — zero-free!)
927	مشارالیه	müşârün-ileyh	1st entry of section حرف میم! May 1293: 672 = †مشارالیه
928	مومی الیه	mûmâ-ileyh	2nd entry of section حرف میم
931	مأمور / مأمورین	me’mûr / me’mûrîn	—
934	موقع / مواقع	mevki‘ / mevâki‘	—
941	محاربه / محاربات	muhârebe / muhârebât	—
942	مملکت	memleket	—
944	مفسد / مفسدت	müfsid / mefsedet	—
951	مهاجر / مهاجرین	muhâcir / muhâcirîn	—
952	محصور / محصوریت	mahsûr / mahsûriyyet	—



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Plate D · BOA, Y.MTV. 1/10 p. 1 (7 Dhu'l-Hijja 1294 / 13 December 1877) — Sequential 58-cell (29 letters × 2 homophones; 23 unassigned codes) «Açmak içün» ("For Deciphering") table.



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Plate E · BOA, Y.MTV. 1/10 Sample Part II Vocabulary from pp. 3 and 5 — Entries 488 = تاريخلى تلغرافنامه لرى, 527 = تحت = الحفظ (showing the zero-free 499 → 512 jump!), and 571 = حضرتلرى.

5. BOA, Y.MTV. 1/11 (21 January 1878) Alphabetical Lexical Codebook

In this lithographed calligrapher's codebook, lexical entries are grouped under alphabetical letter headings حرف الالف، حرف الباء … حرف الياء (49 = اشقيا, 122 = برنجى / بر, 124 = باروت, 125 = بلوك, 132 = پاشا, 241 = حرب, 242 = حركت, 295 = سوق, 526 = فرقه, 586 = يونان). This initial-letter grouping directly explains the Part II ordering logic observed both in the May 1293 cipher book and in Y.MTV. 1/9 (e.g., 549 = طرف, 552 = طابور).

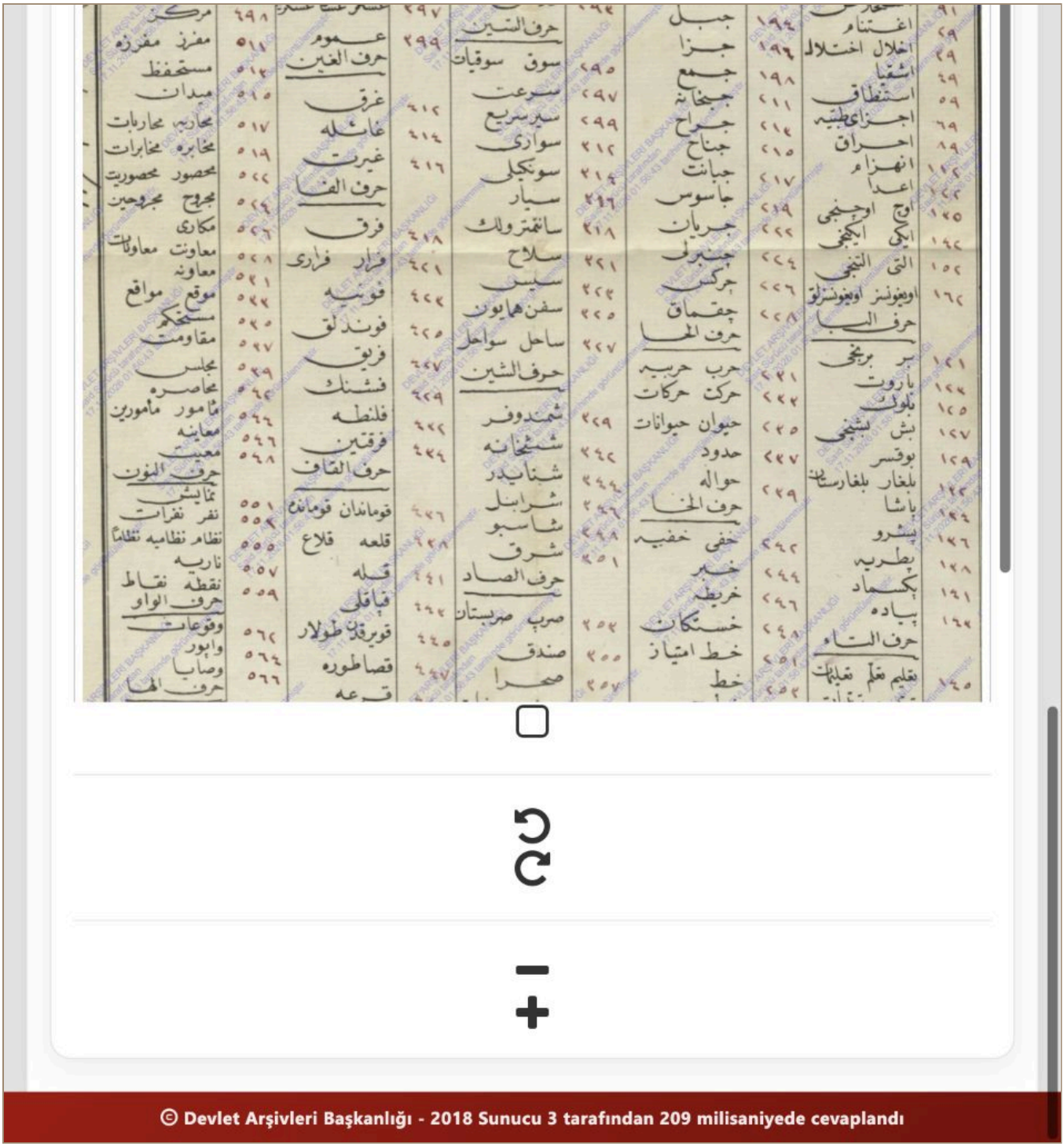


Plate F · BOA, Y.MTV. 1/11 (17 Muharram 1295 / 21 January 1878) — Sublime Porte alphabetical lexical codebook organized under headings «(49 = اشقيا, 132 = پاشا, 242 = حركت, 295 = سوق, 526 = فرقه) حرف الالف، حرف الباء …».