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On distribution of twelfth AWLL newsletter [Terry Joyce (newsletter editor)]

In common with most previous AWLL newsletters, the timing of this twelfth (NL12) falls during one of the relatively more fallow periods between AWLL gatherings (since AWLL13 in October 2021 and AWLL14 (soon to explore possibilities in earnest)). However, although lacking items directly linked to the previous or next conference, NL12 is considerably fuller than most past newsletters, thanks to a variety of much appreciated contributions.

The first is an announcement from Amalia E. Gnanadesikan and Anna P. Judson about the latest *Written Language & Literacy* special issue (2021; V24:2), with papers from AWLL12 'Diversity in writing systems: embracing multiple perspectives'. The second item is a report from Dimitrios Meletis about the *Writing: System, use, ideology* workshop he organized last December. After a short note about ORBWLL Ver.11, NL12 features the newsletter's first short essay from Robert Crellin, entitled *Typology of Latin abbreviations etc.* Although kindly tendered initially for the regular feature of *Thought-provoking quotations and observations*, commensurate with its substance and interest, the piece fully warrants a separate section. Moreover, in addition to the 10th installment of *Introducing writing systems: Japanese*, I am extremely delighted to announce the launch of a new serialization, *Introducing writing systems: Brahmic*, by Anurag Rimzhim. After a single piece under *Thought-provoking quotations and observations* section, NL12 concludes with its regular *Miscellaneous matters*, with its usual listing of recent publications by AWLL community members.

Any comments, ideas, or items for future newsletters, such as more essays or other *Introducing writing systems* series, are always most welcome; just email them to terry@tama.ac.jp.

Past newsletters are available at <http://faculty-sgs.tama.ac.jp/terry/awll/newsletters.html>

AWLL12 special issue of *Written Language & Literacy* 24:2 (2021)

[Amalia E. Gnanadesikan & Anna P. Judson (special issue editors)]

We are very pleased to announce the recent publication of the latest *Written Language & Literacy* special issue. This issue, on the theme of ‘Diversity in writing systems: embracing multiple perspectives’, consists of six papers from AWLL’s 12th workshop, held at the Faculty of Classics, University of Cambridge, U.K. in March 2019. In keeping with this theme and with the wide range of research fields represented amongst AWLL’s membership, the presentations covered a wide chronological and geographical range. The location of the workshop in the Faculty of Classics led to a particular focus on writing systems of the ancient world, represented by two papers in this volume. Two further papers consider the development of writing systems from an ancient model, while the remaining two cover topics in the theory and acquisition of writing systems.

Gnanadesikan, Amalia E. & Judson, Anna P. (2021). Introduction: Diversity in writing systems: embracing multiple perspectives. *Written Language and Literacy* 24:2, 167-170.

<https://doi.org/10.1075/wll.00051.int>

Osterkamp, Sven & Schreiber, Gordian (2021). The ubiquity of polygraphy and its significance for the typology of writing systems. *Written Language and Literacy* 24:2, 171-197. <https://doi.org/10.1075/wll.00052.ost>

Fendel, Victora (2021). The missing piece in the jigsaw puzzle: a psycholinguistic account of the beginnings of the Coptic alphabet. *Written Language and Literacy* 24:2, 198-228.

<https://doi.org/10.1075/wll.00053.fen>

Piquette, Kathryn E. (2021). ‘Reading’ through the body in early Egypt: meaning as mediated and modified. *Written Language and Literacy* 24:2, 229-258. <https://doi.org/10.1075/wll.00054.piq>

Myers, James (2021). Areal script form patterns with Chinese characteristics. *Written Language and Literacy* 24:2, 259-283. <https://doi.org/10.1075/wll.00055.mye>

Nag, Sonali (2021). How children learn to use a writing system: mapping evidence from an Indic orthography to written language in children’s book. *Written Language and Literacy* 24:2, 284-302. <https://doi.org/10.1075/wll.00056.nag>

Gnanadesikan, Amalia E. (2021). Brahmi’s children: variation and stability in a script family. *Written Language and Literacy* 24:2, 303-335. <https://doi.org/10.1075/wll.00057.gna>

[Editor note: Links to the abstracts can be found at <https://doi.org/10.1075/wll.24.2>

Information and links to all of the *Written Language & Literacy* special issues for past AWLL workshops can be found at <http://faculty-sgs.tama.ac.jp/terry/awll/publications.html>]

Workshop report: *Writing: System, use, ideology* [Dimitrios Meletis]

The *Writing: System, use, ideology* workshop was held from 9–10 December 2021, as part of the 46th Austrian Linguistics Conference at the University of Vienna, which, due to the Covid-pandemic, had to be conducted online via Zoom. While, arguably, lacking some of the intimacy and intensity of a traditional in-person workshop, the virtual format allowed both presenters and the audience to interact from around the globe, spanning many time zones from the US to Europe and Australia.

My motivation for organizing the workshop was to further highlight the interdisciplinary nature of writing research—now often referred to as *grapholinguistics*—which embraces a multitude of theoretical and methodological approaches. There are, fortunately, some conference series that strive to serve as open forums for scholars from diverse disciplines to share their work, but, in my view, different perspectives still tend to be rather too blinkered to fully appreciate how they are intricately interconnected and of mutual relevance.

Against that background, the workshop's main goal was to provide a forum for scholars of writing from different disciplines to present and discuss their important tenets and results in a spirit of convergence. As reflected in the workshop's subtitle of *system, use, ideology*, the speakers represent the systematic (i.e., descriptive, structural), psycholinguistic, and/or sociolinguistic approaches. More specifically, to that aim, the workshop featured 12 talks from invited international experts:

- The more traditionally 'linguistic', structural, perspective was manifest in talks focusing on the definition and conception of writing (Peter T. Daniels); correlates of morphological concepts within the study of writing (Amalia E. Gnanadesikan); and what variation in German compound-spellings potentially reveals about linguistic categorization (Stefan Hartmann).
- The psycholinguistic perspective was foundational to the talks that addressed questions of how writing is a manifestation of inner speech (Zohar Eviatar); how children learn and subsequently use writing systems (Rebecca Treiman); and how mirror letters are processed and what that reveals about cognition more generally (Heather Winskel).
- The sociolinguistic and metapragmatic perspectives were represented by talks that tackled the intricate connections between writing, religion, and identity (Florian Coulmas); the indexical dynamics of typography that render it a powerful form of social practice (Jürgen Spitzmüller); the practices, discourses, and ideologies of writing by hand (Nadja Kerschhofer-Puhalo); and the specific features of digital written interaction that are socially indexical (Florian Busch).
- Finally, I took the opportunity to attempt a synthesis of the different strands within my talk that tendered some possible categories for (alternative) structural, psycholinguistic, and sociolinguistic typologies of writing systems.

The dominant reaction amongst the participants was that the workshop's aspiration of deliberately converging these perspectives—which are, ultimately, unified in seeking to develop deeper understandings of writing (systems)—was meaningful in terms of broadening horizons and framing questions to further the study of writing. As an avid 'grapholinguist', it was my great honor to organize the workshop and I would, again, express my sincere gratitude to all who

participated.

Unfortunately, due to the very strict nature of data protection acts in place in Austria, it was not permissible to record the talks (as originally planned). A detailed description of the workshop, its program, and all presentation abstracts can be found here: <https://bit.ly/3MIG947>

ORBWLL Version 11 available [Terry Joyce]

Version 11 of the Online Research Bibliography of Written Language & Literacy (ORBWLL) has been recently updated (20220429; <http://faculty-sgs.tama.ac.jp/terry/awll/orbwill/index.html>).

Version 11 consists of 9,300 reference entries (compared to previous version's 7,545 entries), which are based on processing 3,750 source bibliographies (increased from 3,000). Version 11 is available as a PDF file (760 pages) (which can, naturally, be navigated using the find function) and as a series of alphabetically-sectioned webpages. A supplementary PDF lists the top 104 most-frequently cited entries, in descending order (from 219 to 49 citations).

NB: As the online version includes *Cited by* information (as expandable lists of the relevant source bibliographies) for the majority of reference entries, it may be most beneficial to utilize both the PDF and online versions in combination when consulting and searching for works of interest. As always, feedback concerning any inaccuracies discovered is always most welcome, as are any recommendations for source bibliographies to incorporate within future updates.

Short essay: Typology of Latin abbreviations etc. [Robert Crellin]

A characteristic feature of Latin inscriptions from antiquity is the presence of abbreviations, often in considerable numbers. These can seriously hamper interpretation for the uninitiated. Consider this inscription, written on a Roman ship's ram, in bronze, from the First Punic War (text per *ISic004367*):

¹ C • PAPERIO • TI • F

² M • POPULICIO • L • F • Q • P

As may be seen from the following expanded text, all the words involve some kind of abbreviation (reading and translation per *ISic004367*):

¹ C(aios) • PAPERIO(s) • TI(beri) • F(ilios)

² M(arcos) • POPULICIO(s) • L(ucii) • F(ilios) • Q(uaestores) • P(robaverunt)

“Gaius Papirius, son of Tiberius, (and) Marcus Publicius, son of Lucius, quaestors, approved (this ram)”

The possibility of abbreviating in written Latin has been exploited continuously since Classical times. We need look no further than modern written English which has a number of Latin abbreviations in regular use, including <e.g.> *exempli gratia* “for the sake of example”, <i.e.> *id est* “that is”, <NB> *nota bene* “note well”, <etc.> *et cetera* “and the rest”. Yet another form of

abbreviation is the ligature, as in ampersand <&> *et* “and”.

In the context of a broader typology of writing systems, abbreviations can be analysed as follows (typology per Honkapohja 2021: 6, 9, cf. Gelb 1963: 12–14):

- Logograms: e.g. numerals such as <7>; other abbreviations such as <Ms>, <Dr>; <gr8> ‘great’;
- Rebus-type symbols: e.g. <X> in <Kings X> for ‘Kings Cross’;
- Syllabograms: e.g. <B4> for bisyllabic ‘before’ (Honkapohja 2021: 9).

Laing & Lass (2013: 2.2.1) distinguish between pure ‘icons’ and partial or impure ‘logographs’; strategies that can be placed on a cline of abstraction from more to less abstract. At the less abstract end of the spectrum are partial logographs, whose graphical representations bear partial relation to their phonological form. Examples of this kind of logograph in English include <Mr> and <Dr>, whose forms select the first and last characters from their (more or less) phonologically spelled counterparts. (For context, a full logograph in these terms, is where “the spelling indicates not only a phonological string, but one particular member of a set of homophones”, Laing & Lass 2013: 2.2.1, giving the example of ‘dear’ and ‘deer’).

More abstract are icons, whose phonological representation cannot be extrapolated *a priori* from their graphical form (Laing & Lass 2013: 2.2.1). An example of an icon of this kind in modern English is the ampersand <&> (Laing & Lass 2013: 2.2.1), realised phonologically as /and/. Indeed, though its form is in fact a ligature of <et> (= Latin for ‘and’; see <https://en.wikipedia.org/wiki/Ampersand>, accessed 25th April 2022), even if <&> were written transparently as <et>, it could still be an icon in these terms, since it would be impossible to arrive at a reading of /and/ from <et> unless one already knew Latin.

Latin abbreviation may take various forms (typology and examples per Cooley 2012, 359):

- Suspension (= omission of the end of the word), e.g. <IMP> *imp(erator)* “general”;
- Contraction (= omission of letters from the middle of the word), e.g. <PBR> *p(res)b(ite)r* “elder”;
- Contraction with suspension, e.g. <QQ> *q(uin)q(uennalis)* “quinquennial”;
- Doubling / tripling for pluralisation, e.g. <AVGG NN> *Aug(usti) n(ostri)*, (lit. “our Augustuses”, referring to two emperors); <AUGGG NNN>, (lit. “our Augustuses”, referring to three emperors) (see also Stevenson 1889, 95).

The first three types of abbreviation — contraction, suspension, and contraction with suspension — produce partial logographs, since they involve selecting variously from the characters making up the full (phonographic) spelling.

The fourth type, viz. doubling or tripling for pluralisation, e.g. <AVGG NN> *Aug(usti) n(ostri)*, is different. What one might call the ‘root’ elements, viz. <AVG> *Augusti* “Augustuses” and <N> *nostri* “our”, are again partial logographs, involving suspension. PLURAL is, however, conveyed not with reference to the PLURAL morpheme of the phonological language, but by multiplying the final letter of the root element. The same strategy can be found in modern English writing: consider the singular <ex.> and plural <exx.> forms of the abbreviation for Latin <exemplar> (read ‘example’) (see https://en.wikipedia.org/wiki/List_of_Latin_abbreviations, accessed 7th April

2022).

This graphical pluralisation has an almost exact parallel in (Old) Egyptian hieroglyphic writing. There PLURAL may *inter alia* be denoted by repeating the final sign of a word, which may be the determinative (Nederhof & Rahman 2017: 140–141; Allen 2014: 45; Sproat 2000: 54–55). For example, <𓂏𓂏𓂏> ḥq; “ruler”, where the determinative is <𓂏>, can be written <𓂏𓂏𓂏𓂏𓂏> ḥq;w “rulers”, with threefold repetition of the determinative (see Allen 2014, 45). Latin has no determinatives; instead for <AVGG> and <AVGGG>, the final character of the logograph <AVG> is repeated.

Representing the morphological category PLURAL by means of (final) grapheme repetition may be considered ‘pure’ in the sense that the resulting string bears no relation to the phonological form of the PLURAL morpheme. However, it is not the same as the pure icon strategy described Laing & Lass (2013), in that the denotation of PLURAL arises by the fact of repetition of a(ny) sign, rather than the writing of a sign specific to the denotation of PLURAL. Thus, this multiplication strategy involves one stage of abstraction further even than that of iconic <&>.

What is perhaps most striking, however, is that two writing systems, which at first sight have little in common, can adopt the same multiplicative strategies for pluralisation.

Acknowledgements

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I.Sicily document

ISic004367: Prag, J. R. W., Cummings, J., Chartrand, J., Vitale, V., Metcalfe, M. and Stoyanova, S. ‘I.Sicily 004367.’ Revised 2021-01-19.

<http://sicily.classics.ox.ac.uk/inscription/ISic004367>; <https://doi.org/10.5281/zenodo.4381814>

References

- Allen, J. P. 2014. *Middle Egyptian: An introduction to the language and culture of hieroglyphs*, 3rd edn. Cambridge: Cambridge University Press.
- Cooley, A. 2012. *The Cambridge handbook to Latin epigraphy*. Cambridge: Cambridge University Press.
- Gelb, I. J. 1963. *A Study of Writing*, 2nd edn. Chicago, London: The University of Chicago Press.
- Honkapohja, A. (2021) ‘Digital approaches to manuscript abbreviations: Where are we at the beginning of the 2020s?’, *Digital Medievalist* 14(1). <https://doi.org/10.16995/dm.88>
- Laing, M. and Lass, R. 2013. “Introduction.” In Laing, M. (ed.) *A linguistic atlas of early Middle English, 1150–1325, Version 3.2*. Edinburgh: The University of Edinburgh.
<http://www.lel.ed.ac.uk/ihd/laeme2/laeme2.html>. Accessed 8th April 2022.
- Nederhof, M. and Rahman, F. (2017) ‘A probabilistic model of Ancient Egyptian writing’, *Journal of Language Modelling* 5(1), 131–163.
- Sproat, R. 2000. *A computational theory of writing systems*. Cambridge: Cambridge University Press.
- Stevenson, S. W. 1889. *A dictionary of Roman coins: Roman and Imperial*. London: George Bell.
- [Editor note: Robert Crellin is a research associate on the CROSSREADS Project at the University of Oxford (<https://crossreads.web.ox.ac.uk/>)]

Introducing writing systems: Japanese [10] [Terry Joyce & Keisuke Honda]

This installment continues our mini-series on 平仮名 /HIRA-GA-NA/ ‘hiragana’ and 片仮名 /KATA-KA-NA/ ‘katakana’; the two syllabographic kana components of the Japanese writing system. In contrast to the initial piece last time, which sketched out their separate historical developments, this installment seeks to succinctly describe the two sign sets, stressing how signs correspond to the core Japanese phonological unit, the mora.¹ Thus, after presenting a chart of the basic signs and outlining the principal strategies for extended signs, we also briefly touch on the few remaining details (admittedly, this somewhat sweeping coverage is mainly descriptive in nature, with fuller examples deferred to the next piece).

Table 1. The basic contemporary kana signs, arranged according to the traditional 五十音図 /GO-JŪ-ON-ZU/ ‘fifty sounds chart’, with the hiragana sign first and the katakana second.

	/a/	/i/	/u/	/e/	/o/
∅	あ ア	い イ	う ウ	え エ	お オ
/k/	か カ	き キ	く ク	け ケ	こ コ
/s/	さ サ	し シ	す ス	せ セ	そ ソ
/t/	た タ	ち チ	つ ツ	て テ	と ト
/n/	な ナ	に ニ	ぬ ヌ	ね ネ	の ノ
/h/	は ハ	ひ ヒ	ふ フ	へ ヘ	ほ ホ
/m/	ま マ	み ミ	む ム	め メ	も モ
/y/	や ヤ		ゆ ユ		よ ヨ
/r/	ら ラ	り リ	る ル	れ レ	ろ ロ
/w/	わ ワ				を ヲ

As the first row of Table 1 presents, the five Japanese vowels (V: /a/, /i/, /u/, /e/ and /o/) are represented by five hiragana and five katakana signs (in all examples below, the hiragana sign is followed by the corresponding katakana sign). Moreover, as the other rows indicate, there are also 39 consonant-vowel (CV) signs for both kana sets, which are ordered by the initial C row plus the V column. Thus, for instance, as located at the intersection of the /t/ row and /a/ column, た and タ both represent the CV mora of /ta/. It should, however, be noted that there are a few gaps within the contemporary kana chart, due to either the C+V combination never existing in Japanese (e.g., /yi/) or becoming obsolete (e.g., ゃ and ゅ for /we/, respectively).

There are two basic strategies for expanding on these basic signs. The first involves the use of two kinds of diacritic marks to differentiate between unvoiced and voiced mora. The more frequently occurring is ˘, 濁点 /DAKU-TEN/ ‘voicing mark’, which can be appended to the

basic signs on rows /k/, /s/, /t/, and /h/. For example, when appended to き and キ (/ki/), the extended forms of ぎ and ギ, respectively, represent the mora /gi/. The second diacritic °, 半濁点 /HAN-DAKU-TEN/ ‘semi-voicing mark’, is only appended to the /ha/ row signs. In contrast to appending ˘ to ほ and ホ (/ho/) to derive the extended signs of ぼ and ぼ° for /bo/, appending ° yields ぽ and ぽ°, which represent /po/.

The second strategy of extending the basic sign sets involves the merging of certain basic signs with the reduced forms of V or yV signs. Such merging was traditionally limited to representing /CyV/ morae, by combining Ci signs and the three /yV/ signs. For instance, にゃ and ニャ represent /nya/, which are combinations of に and ニ for /ni/ with the reduced や and ヤ /ya/ signs, respectively. However, the same core tactic also underlies the representation of foreign-Japanese morae. As katakana is generally used to represent foreign names and loanwords, the extended signs for foreign-Japanese morae typically merge basic katakana signs, such as シ /shi/ combined with a reduced エ /e/ to represent シェ /she/.

To conclude this, admittedly, rather rapid overview of kana, there are three further details that warrant brief mention. The first is that both kana sets also include basic signs, ん and ン, for the mora nasal, conventionally transcribed as /N/. A second detail is that mora obstruents are represented by reduced versions of /tsu/, つ and ツ respectively. Although conventionally transcribed as /Q/, this notation is essentially a place marker to cover a range of consonant geminations, such as in ちよつと /chotto/ ‘a little bit’, where the reduced /tsu/ is representing the gemination of the following /t/ consonant of と /to/. The final aspect to mention is the representation of vowel length (short versus long), which frequently differentiate words. When representing native-Japanese and Sino-Japanese words, long vowels are basically indicated by repeating the corresponding vowel sign, such that さあ and サア /sa:/ are represented by さ and サ /sa/ being followed by あ and ア /a/, respectively. There are, however, a couple of notable exceptions with this approach to vowel lengthening. Firstly, due to some historical residues, the lengthening of /e:/ may be represented by either /e/ or /i/, while the lengthening of /o:/ may be represented by either /o/ or /u/. Secondly, in the case of foreign-Japanese, vowel lengthening is represented by an additional katakana sign, ー, such that /sa:/ could also be represented as サー.

Having tendered a very brief description of the two syllabographic kana sets, in terms of both their basic and extended signs, the next installment will endeavor to supplement this outline with examples to illustrate the conventions of graphematic representation that guide their uses as components of the Japanese writing system.

¹Within the Japanese grapholinguistic literature, the unit is referred to as 拍 /HAKU/ ‘beat’ or モーラ /mōra/ ‘mora’; the moraic account is widely accepted (e.g. Honda 2012), but some researchers have questioned the notion and prefer to refer to the unit as ‘core syllabic’ (e.g. Buckley 2018).

Introducing writing systems: Brahmic [1] [Anurag Rimzhim]

This series will introduce some of the characteristics of South and Southeast Asian orthographies that are all derived from a single shared writing system known as Brahmi (/bra:hmi:/, often represented as Brāhmī), which can be traced back at least to the third century BCE. More specifically, this series will primarily present examples of the written Hindi language, which uses the Devanagari (often represented as Devanāgarī) script; a Brahmic script that is currently employed in representing Hindi, Marathi, Nepali, and Sanskrit. Within various writing system typologies, Brahmic writing systems are referred to as either an alphasyllabary (Bright, 2000), as an abugida (Daniels, 1996), or as aksharic (Rimzhim et al., 2014) (even though the underlying distinctions between these typological terms are touched on fleetingly below, fuller treatment of these terms must be deferred to a later installment).

Given that the most distinctive characteristics of Brahmic writing systems is the *akshara* (/əkṣərə/; commonly pronounced as /ək.ʃər/ in Hindi), this first installment focuses on the two fundamental properties of aksharas. The first property relates to how to appropriately conceptualize the written akshara itself, which may be symbolized as $[C_n]V$, where $[C_n]$ refers to the number ($_n$) of non-obligatory onset consonant(s) (C) and V for vowel. That is, an akshara obligatorily represents a syllable nucleus or (vowel) and, optionally, up to three onset consonants. Thus, the range of possible akshara structures are V, CV, CCV, and CCCV, where V can be either a short or long vowel (with vowel length alone differentiating between some Hindi words). It should also be noted that aksharas represent *open syllables*, such that any codas or post-vocalic consonants are represented by another subsequent akshara. In illustration of this key point, for example, consider the written representation of the word <हिन्दी> /Hindi/, which is represented by two aksharas, <हि> <hi> and <न्दी> <ndi>. Even though the akshara boundary, marked with an asterisk, is <हि*न्दी> <hi*ndi>, reflecting the open-syllable organization of aksharas, its syllable boundary, marked with a dot, is /hin.di/.

As written units, aksharas visually group the written forms of the C and V phonemes of an open syllable (apart from schwa, as described below). For example, the written word <प्यारी> /pya:ri:/ ‘dear’ consists of two aksharas, with the first of <प्या> /pya:/ being a ligature (or aksharic) combination of a *half-form* of /p/ (<पु>),¹ <य> /y/, and the diacritic form of /a:/,² and the second of <री> /ri:/ being a combination of the signs for <र> /r/ and the diacritic form of /i:/. It is, however, crucial to note that the constituent signs of aksharas remain largely discernable, because, although they just touch each other, they are not completely ‘fused’ together to produce merged forms. This visual discernibility of akshara constituents, where each element represents either a C or V phoneme (excluding schwa), arguably, appears to render Brahmic writing systems as being predominantly alphabetic in nature.

The second fundamental property of Devanagari is that it does not explicitly represent schwa /ə/, which is the most frequent vowel of the Hindi language. Rather, all Devanagari consonant aksharas, when written alone, represent /Cə/; a consonant and the unwritten default schwa vowel. For example, the consonant akshara <त> represents the CV syllable /tə/. It should, however, be noted that, although the notion of the unwritten vowel is common to all

Brahmic-derived writing systems, the value of the default vowel varies in other languages, where, for example, consonant aksharas represent either /Cə/ or /Co/ in Bengali or /Co/ in Oriya. This inherent-vowel property of written consonant aksharas, common to all Brahmic orthographies, also gives them certain syllabic characteristics.

However, whenever consonant aksharas occur in final positions, they only represent the initial consonant, due to a process of *schwa deletion*. For example, the consonant akshara <त> represents /t̪ə/ when written alone or in non-final positions, but, in final positions, it only represents the phoneme /t̪/, as in <मत> /mət̪/ ‘opinion’. Moreover, when a consonant is followed by any vowel other than schwa, for example, /i/ after /h/ and /i:/ after /d/ in /hin.di:/, the diacritic form of respective vowel is attached to the consonant akshara <Cə>, which then only represents its /C/ phoneme (this aspect of vowel representation will be described further in the next part of this series). Thus, to reiterate, consonant aksharas typically represent /Cə/ syllables, a combination of a consonant and schwa, but they only represent the /C/ phonemes when occurring in final positions or when followed by the diacritic form of a vowel (other than schwa).

To further illustrate these key points, consider the written word <मतलब> /mət̪.ləb/ ‘meaning’. It represents the phonological sequence /CəC.CəC/ and is comprised of the aksharic sequence of <Cə*C*Cə*C>, formed by combining the consonant aksharas <म> /mə/, <त> /t̪/, <ल> /lə/, and <ब> /b/. Although the first and third aksharas denote /Cə/ syllables, the second and fourth aksharas in the syllable-final positions only denote the respective /C/ phonemes. Moreover, because schwa is the only vowel value to occur within this word (as the two syllable nuclei), the word does not require the explicit written representation of other vowels. In this respect, Brahmic orthographies can be regarded as possessing the characteristics of consonantal writing systems. However, as subsequent installments of this feature will explain, all the vowels of Hindi that follow a consonant, apart from schwa, are explicitly represented by diacritics. It is worth pointing out that diacritics are visually smaller than consonant aksharas and are dependent forms, in the sense that they only attach to consonant aksharas, which are independent.

The next part of this series will focus on the further principles that govern the concatenation of two written forms of consonants as well as the representation of vowels within more complex aksharas. The implications of combining such segmental forms for the alphasyllabic characteristics of Brahmic writing systems will also be noted.

¹Please note that Unicode does not have *separate* character codes for all ligature forms; particularly, the half-forms of consonants and the diacritic forms of vowels.

²The diacritic form of /a:/ is another example of a ligature element without a separate character code, but, in form, it is a simple vertical line <।>.

Thought-provoking quotations and observations [12]

Quotations and brief remarks shared by Terry Joyce

Since recently stumbling upon McCloud's (1993) *Understanding comics: The invisible art* and, more specifically, his proposal for a definition of comics (p. 9), I find myself pondering (once again) about our working definitions for both writing and, depending on their scope, pictorial representation. Qualified across a number of preceding comic panels, McCloud's definition proposal is presented as if appearing on the page of a dictionary (with such conventions intact):

com.ics (kom'iks) **n.** plural in form, used with a singular verb. **1.** Juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer. ...

Setting aside comments about worthy candidate definitions for pictorial representation (although any thoughts from more qualified others certainly welcome), hopefully, a couple of contrastive definitions of writing can serve to capture something of the thorny knot. In contrast to Gelb's (1952: 253) inclusive stance, where writing is glossed as "a system of intercommunication by means of conventional visible marks" (an open interpretation that would, arguably, encompass McCloud's definition of comics), Daniels' (1996: 3) definition, since first pronouncement and subsequent reiterations, emphasizes a link to spoken language, as "a system of more or less permanent marks used to represent an utterance in such a way that it can be recovered more or less exactly without the intervention of the utterer". Undoubtedly, the enterprise of aptly demarcating the boundary between the typology of writing systems and the larger spheres of semasiographic and pictorial representation is quite a vexing one. Indeed, beyond the perennial mission to adequately account for the semantic aspects of Chinese characters (Japanese kanji), the increasingly wide-spread propagation of emoji (Danesi 2017) would seem to lend renewed enigmatic significance to the task.

Danesi, Marcel. (2017). *The semiotics of emoji: The rise of visual language in the age of the internet* (Bloomsbury Advances in Semiotics). London, New York: Bloomsbury Academic.

Daniels, Peter. T. (1996). The study of writing systems. In Peter T. Daniels & William Bright (Eds.), *The world's writing systems* (pp. 3–17). New York; Oxford: Oxford University Press.

Gelb, Ignace J. (1952). *A study of writing: The foundations of grammatology*. Chicago: University of Chicago Press. [Revised edition, 1963, Chicago & London: University of Chicago Press.

McCloud, Scott. (1993). *Understanding comics: The invisible art*. HarperPerennial.

Miscellaneous matters

Sundry information about related conferences, projects, etc.

Grapholinguistics in the 21st century 2022

Télécom Paris, Palaiseau, France; 8-10 June 2022

<https://grafematik2022.sciencesconf.org/>

[List of presentations available, as well as registration information]

Atelier "Systèmes d'écriture en contact en Asie orientale"

Workshop on "East Asian Writing Systems in Contact" in conjunction with the 35th Paris Meeting in East Asian Linguistics; 9 June 2022

<http://crlao.ehess.fr/index.php?2193>

Cisalpine Celtic Literacy

Maynooth, Ireland; 23-24 June 2022

https://www.univie.ac.at/lexlep/wiki/Symposium_2022

29th Annual Meeting of the Society for the Scientific Study of Reading

Newport Beach, CA; 13-16 July 2022

<https://www.triplesr.org/index.php>

International Conference on Graphemics at UiA: ScriptandSound-5

Fevik Strandhotel, Norway; 25-28 October 2022

<https://www.uia.no/en/events/international-conference-on-graphemics-at-uia-scriptandsound-5>

7th Annual Conference for the Association for Reading and Writing in Asia (ARWA 2023)

Pan Pacific Hotel, Hanoi, Vietnam; 23-24 February 2023

<https://www.arwasia.org/arwa-2023>

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**Recent publications by AWLL core community members**

As customary, the *Miscellaneous matters* section concludes with a list of recent publications (i.e., since the last newsletter) by AWLL community members, which is followed by a 'mini-flyer' for one recent book.

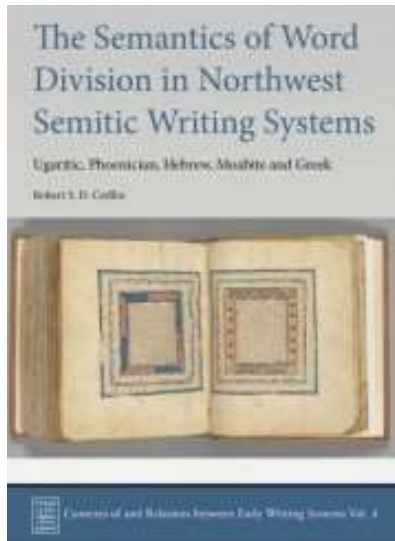
AWLL mailing list is open to anyone interested in receiving occasional information emails, but the core community is based primarily on participation at AWLL workshops. Participants at the three most recent workshops (AWLL11 in 2017, AWLL12 in 2019 and AWLL13 in 2021) are eligible to have a brief member profile at the community page of the AWLL website and to also have recent publications included under this section of future newsletters (for further information, go to <http://faculty-sgs.tama.ac.jp/terry/awll/community.html>).

Cahill, Michael. (2021). Marking grammatical tone in orthographies: Issues and challenges. In Akinbiyi Akinlabi, Lee Bickmore, Michael Cahill, Michael Diercks, Laura J. Downing, James Essegbey, Katie Franich, Laura McPherson & Sharon Rose (Eds.), *Celebrating 50 years of ACAL: Selected papers from the 50th Annual Conference on African Linguistics* (pp. 67-78). Berlin: Language Science Press.

Crellin, Robert S. D. (2022). *The semantics of word division in Northwest Semitic writing systems: Ugaritic, Phoenician, Hebrew, Moabite and Greek* (Contexts of and Relations Between Early Writing Systems 4). Oxford: Oxbow.

- Dattner, Elitzur, Levie, Ronit, Ravid, Dorit, & Ashkenazi, Orit. (2021). Patterns of adaptation in child-directed and child speech in the emergence of Hebrew verbs. *Frontiers in Psychology*, 12: 719657. <https://doi.org/10.3389/fpsyg.2021.719657>
- Gnanadesikan, Amalia E. (2021). Brahmi's children: Variation and stability in a script family [Special issue: Diversity in writing systems: Embracing multiple perspectives, edited by Amalia E. Gnanadesikan & Anna P. Judson]. *Written Language and Literacy*, 24(2), 303-335. <https://doi.org/10.1075/wll.00057.gna>
- Gnanadesikan, Amalia E., & Judson, Anna P. (2021). Introduction: Diversity in writing systems: Embracing multiple perspectives [Special issue: Diversity in writing systems: Embracing multiple perspectives, edited by Amalia E. Gnanadesikan & Anna P. Judson]. *Written Language and Literacy*, 24(2), 167-170. <https://doi.org/10.1075/wll.00051.int>
- Joyce, Terry, & Meletis, Dimitrios. (2021). Alternative criteria for writing system typology: Cross-linguistic observations from the German and Japanese writing systems [Special issue: The evolution of writing systems: Empirical and cross-linguistic approaches, edited by Lisa Dücker, Stefan Hartmann, Jessica Nowak, & Renata Szczepaniak]. *Zeitschrift für Sprachwissenschaft*, 40(3), 257-277. <https://doi.org/10.1515/zfs-2021-2030>
- Mora-Marín, David F. (2022). Evidence, new and old, against the late \*k(ʻ) > ch(ʻ) “Areal Shift” Hypothesis. In Wilson Silva, Nala Lee, & Thiago Chacon (Eds.), *Festschrift for Lyle Campbell* (pp. 130-163). Edinburgh: Edinburgh University Press.
- Neef, Martin. (2021). Zur Kommasetzung im Deutschen: Eine Analyse mittels dreier systematisch-orthographischer Bedingungen. In Paul Rössler, Peter Besl & Anna Saller (Eds.), *Vergleichende Interpunktion - Comparative punctuation* (Linguistik – Impulse & Tendenzen 96) (pp. 3-24). Berlin: de Gruyter.
- Treiman, Rebecca, & Kessler, Brett. (2022). Learning and using written word forms. In Anna Papafragou, John C. Trueswell, & Lila R. Gleitman (Eds.), *Oxford handbook of the mental lexicon* (pp. 506-518). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198845003.013.24>

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Crellin, Robert S. D. (2022). *The semantics of word division in Northwest Semitic writing systems: Ugaritic, Phoenician, Hebrew, Moabite and Greek*. Oxford: Oxbow.

It can be downloaded at:

https://crewsproject.files.wordpress.com/2022/01/the-semantics-of-word-division_print_1.pdf

Publisher's website:

<https://www.oxbowbooks.com/oxbow/the-semantics-of-word-division-in-northwest-semitic-writing-systems.html>

Much focus in writing systems research has been on the correspondences on the level of the grapheme/phoneme. Seeking to complement these, this monograph considers the targets of graphic word-level units in natural language, focusing on ancient North West Semitic (NWS) writing systems, principally Hebrew, Aramaic, Phoenician and Ugaritic. While in Modern European languages word division tends to mark-up morphosyntactic elements, in most NWS writing systems word division is argued to target prosodic units, whereby written 'words' consist of units which must be pronounced together with a single primary accent or stress.

AWLL board

President: Terry Joyce; vice-presidents: Lynne Cahill & Dorit Ravid

AWLL website: <http://faculty-sgs.tama.ac.jp/terry/awll/index.html>

On Facebook and Twitter [@awll]

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