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Cultural hybridity

Multisourced neologization in 'reinvented' languages and in languages with 'phono-logographic' script

Ghil'ad Zuckermann

University of Cambridge

This paper analyses an important but hitherto neglected method of borrowing between languages. It introduces the term 'phono-semantic matching' (henceforth PSM) to describe the technique whereby a foreignism is reproduced in the target language, using pre-existing native elements that are similar to the foreignism both in meaning and in sound, and it traces its occurrence in two key language groups: (1) 'reinvented' languages, in which language-planners attempt to replace undesirable loanwords e.g., Israeli (a.k.a. 'Revived Hebrew' or 'Modern Hebrew') and Revolutionized Turkish; and (2) languages using a phono-logographic script e.g., Chinese and Japanese (to the extent that kanji are used). Such multisourced neologization is an ideal means of lexical enrichment because it conceals foreign influence from the future native speakers, ensuring lexicographic acceptability of the coinage, recycles obsolete autochthonous roots and words (a delight for purists) and aids initial learning among contemporary learners and speakers. Linguists have not systematically studied such camouflaged hybridity. Traditional classifications of borrowing ignore it altogether, and categorize borrowing into either substitution or importation. However, as this paper demonstrates, PSM is a distinct phenomenon, which operates through simultaneous substitution and importation. Its recognition carries important implications not only for lexicology and comparative historical linguistics, but also for sociolinguistics and cultural studies.

Keywords: contact between languages/cultures, comparative historical linguistics, Arabic/Aramaic/Chinese/Hebrew/Israeli/Japanese/Mandarin/Turkish/Yiddish

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1 Introduction

> *Language is an archaeological vehicle, full of the remnants of dead and living pasts, lost and buried civilizations and technologies. The language we speak is a whole palimpsest of human effort and history.*
>
> (Russell Hoban in an interview, cf. Haffenden 1985: 138)

On 27 April 1890 the Hebrew newspaper *HaZefira*, published in Warsaw, carried an article entitled צעד לפנים להרחיב שׂפת עבר *tsáad lefaním leharkhív sfat éver* 'One step forwards – to expand the Language of Eber (Hebrew)'. The author, Chaim Leib Hazan, from Hrodna (a.k.a. Grodno), wrote:

> את כלי הזכוכית אשר נשׂים על עינינו (Brille, okulary, очки), אשר הרכיבו לשמו מלים שונות בדרכים למען היטיב ראות שונות: כלי מחזה, כלי ראות, כלי ראי, בתי עינים – עלה על לבי לקרוא משקפים – הנה איש לא יכחש, כי טוב שם בן מלה אחת משם מרבה מלים.
>
> The glass tool, which we put over our eyes in order to see well (очки, *okulary*, *Brille*)[1], which has been given many different names*:* כלי מחזה *kli makhazé* ['tool of vision'], כלי ראות *kli reút,* כלי ראי *kli rói* ['seeing tool'], בתי עינים *batéy eynáim* ['houses of eyes'], I propose to call משקפים *mishkafáim*. No one will deny that a one-word name is better than a multiple-word name.[2] (p. 4)

Hazan goes on to explain – somewhat reluctantly[3] – that he chose the (Biblical) Hebrew root שקף √*ʃqp* (the root of משקפים *mishkafáim*) '…because of its similarity to the Greek word σκοπέω *skopéō* ('I look at'), which appears in the names for all glass lenses in the languages of Europe: *telescope, microscope, kaleidoscope* and the like' (italics are mine. Hazan translates σκοπέω *skopéō* as 'I *will* look at'). Note also Yiddish שפּאַקולן ***shpak****úlẓ* 'spectacles' (cf. Standard Yiddish ספּאַקולן *spakúlẓ*, the more common word being בריל *brílẓ* 'glasses'). Biblical Hebrew שקף √*ʃqp* originally meant 'bend, arch, lean towards' and later 'look out (from the door/window), look through' (e.g. in Proverbs 7:6).[4]

There are two possible etymological analyses at this stage:

1. INDUCTION (NO BORROWING): The etymon of משקפים *mishkafáim* 'glasses, spectacles' is (Biblical) Hebrew שקף √*ʃqp* fitted into the Hebrew noun-pattern *mi□□á□* in its dual form – with the dual suffix (Hebrew>) Israeli[5] ים- *-áim*, cf. (Rabbinic Hebrew>) Israeli מספרים *misparáim* 'scissors', (Biblical Hebrew>) Israeli מכנסים *mikhnasáim* 'trousers'. The [f] in [mi**ʃ**ka'**f**aim] is an allophone – owing to spirantization – of the plosive radical /p/ (פ). The coinage was influenced by the Ancient Greek *skopéō*. Following this line of thought, משקפים *mishkafáim* is an induced creation or, more precisely, an induced discovery if one takes into account the fact that the neologizer knows in advance the

approximate result of the neologization, i.e. a lexical item in the target language (henceforth, TL) that sounds similar to the parallel expression in the source language (henceforth, SL). In fact, Hazan admits that he *selected* the existing root שקפ √*ʃqp*, which suited the sound of Greek σκοπέω *skopéō*.[6]

2. MULTISOURCED NEOLOGIZATION (CAMOUFLAGED BORROWING): Israeli משקפים *mishkafáim* derives simultaneously from two distinct sources: Greek σκοπέω *skopéō* and (Biblical) Hebrew שקפ √*ʃqp* fitted into the Hebrew noun-pattern *mi□□á□* in its dual form. Figuratively speaking, one might say that the mother of the word is Hebrew since the word was born within the Hebrew language, from Hebrew elements; however, the father is a foreigner – in this case Ancient Greek. The latter is camouflaged by the Hebrew morphology of the coinage.

Many linguists and most purists would suggest that Analysis 1 is the correct one, basing their judgement on conservative tenets such as **(i)** The etymology of a lexical item is determined by morphology (and **משקפים** *mishkafáim* is, in fact, morphologically Hebrew), and **(ii)** A lexical item necessarily has only one etymon (this is parallel to the belief that a language can have only one source[7]). However, such conservative, *structural* views, just like the traditional classifications of sources of lexicon-enrichment (cf. §5.4), fail to take into account the effects of language contact (which is certainly on the increase in this era of globalization). I would advocate a broader-based, *motivational* approach, one that considers the lexeme or sememe's covert cultural and social aspects to be as important as its morphology. Analysis 2 would consequently be the correct one, its striking result being that משקפים *mishkafáim* can be considered a surface-cognate of English *spectacles*, *spy*, *spectrum*, *specific*, *spice*, *species*, *special*, and *expect* – all of which go back to PIE (Proto-Indo-European) **spek-* 'look'; as well as of English *telescope*, *scope*, *sceptic* – which can be traced back to PIE **skep-* 'look', a metathetical form of PIE **spek-*.

Indeed, the logic of Hazan's choice has been completely forgotten, since his use of the Hebrew morphemes serves as an effective camouflage for the Greek co-etymon of this common word in Israeli. Furthermore, in 1896 Eliezer Ben-Yehuda invented a new word which is a secondary derivative from משקפים *mishkafáim*: משקפת *mishkéfet* 'telescope' (see *HaZevi*, 1896, 22 Kislev *h.t.r.n.z.*, as well as Pines 1897: XIV), and this eventually gained currency with the meaning 'field-glasses, binoculars'.[8]

Israeli משקפים *mishkafáim* is but one example of what is, in fact, a pervasive form of lexical borrowing, which can be observed in Israeli, as well as in other languages such as Turkish, Chinese, Japanese, Hebrew and Arabic. In accordance with Analysis 2 above, I call this phenomenon *phono-semantic matching* (PSM) and define it as *camouflaged borrowing in which a foreignism is matched with a phonetically and semantically similar pre-existent autochthonous lexeme/root*. Thus, PSM may alternatively be defined as *the entry of a neologism that preserves both the meaning and the approximate sound of the parallel expression in the SL, using pre-existent TL lexemes or roots.*[9] The following figure is a general illustration of this process:

SL x 'a' → → → → → → → → **$TL_{(+PSM)}$ y' 'a'** ← ← ← ← ← ← ← ← **TL y 'b'**

y is phonetically similar to x
b is similar to a
y' is based on y
a' is based on a

Figure 1

The figure below summarizes the process with regard to משקפים *mishkafáim* 'glasses':

Figure 2

2 PSM as a neglected universal phenomenon

> *The study of words may be tedious to the school-boy, as breaking of stones is to the wayside labourer, but to the thoughtful eye of the geologist these stones are full of interest – he sees miracles on the high road, and reads chronicles in every ditch.*
>
> (Müller 1871: i:2)

Although this source of lexical enrichment is widely diffused, it has not been systematically studied by linguists but rather dismissed with an honourable mention. In his *Patterns and Trends of Linguistic Innovations in Modern Hebrew*, Sivan hardly mentions this phenomenon; he makes only one reference to it, of just three lines (1963: 37-8). The phenomenon is mentioned briefly by Heyd (1954: 90), who refers to *calques phonétiques*, by Hagège (1986: 257), who calls it *emprunt-calembour*, and by Toury (1990), who refers to *phonetic transposition*. Chaim Rabin offered the term תצלול *tatslúl* (see Kutscher 1965: 37, with no reference)[10], fitted into the same noun-pattern of (Rabbinic Hebrew>>) Israeli *targúm* 'translation' but deriving from (Biblical Hebrew>>) Israeli צליל *tslil* 'sound'. In the case of Chinese, Luó (1950) mentions 音兼意 MSC (Modern Standard Chinese) *yīnjiānyì*, lit. 'sound+concurrent with+meaning', while Lǐ (1990) describes MSC 音译兼意译 *yīnyìjiānyìyì* 'phonetic translation along with semantic translation'. Whilst Hansell discusses *semanticized transcription* (1989) and *semanticized loans* (ms), Yáo (1992) refers to (Taiwan Mandarin) 音中有義 *yīnzhōngyǒuyì*, lit. 'sound+middle+have+meaning', i.e. 'transcription in which the meaning lies within the sound'.

PSM is widespread in two categories of language (cf. Zuckermann 2000):

1. 'reinvented languages', in which language planners attempt to replace undesirable loanwords, e.g. Israeli and Revolutionized Turkish.
2. languages that use phono-logographic script, e.g. Chinese, as well as Japanese and Korean (the latter two when using *Kanji* or *Hanja* respectively), all of which are influenced by cultural superstratum languages such as English.

Let us consider two examples of PSM from Turkish, two from Modern Standard Chinese, one from Taiwan Mandarin and one from Japanese.

2.1 Revolutionized Turkish

> *Ağaca balta vurmuşlar, 'sapı bedenimden' demiş.*
>
> They struck the tree with an axe [and] it said: 'The handle is from my body!'.
>
> (Turkish proverb, cf. Şinasi 1885, Aksoy 1965: 79, Yurtbaşı 1994: 176)

> *I know most of the dialects of the Asian Turks. I also understand the dialect spoken by you and people like Yakup Kadri. If there's one dialect I can't make head or tail of, it's the dialect of the Turkish Language Society.*
>
> (Abdülkadir to Atay in the 1930s, cf. Atay 1965, 1969: 478; translation by Lewis 1999: 54, cf. 1997: 26)

Turkish *belleten* 'bulletin' (Heyd incidentally mentions *belletem*, 1954: 91) derives from **(i)** French/International *bulletin* and **(ii)** Turkish *belle-* 'learn by heart' (cf. Turkish *bellek* 'memory', *bellemek* 'to learn by heart'). Turkish *belleten* has not gained currency but has been used as the name of the bulletin of the Turkish Historical Society (*Türk Tarih Kurumu*) (see *Belleten* 1996). *The Oxford Turkish-English Dictionary* (=*OTED*, i.e. Hony, İz and Alderson 1992) (:65) defines *Belleten* as 'learned journal'. A mere phonetic adaptation, which is in fact the current term for 'bulletin', is *bülten* 'bulletin' (cf. Lewis 1999: 61-2).

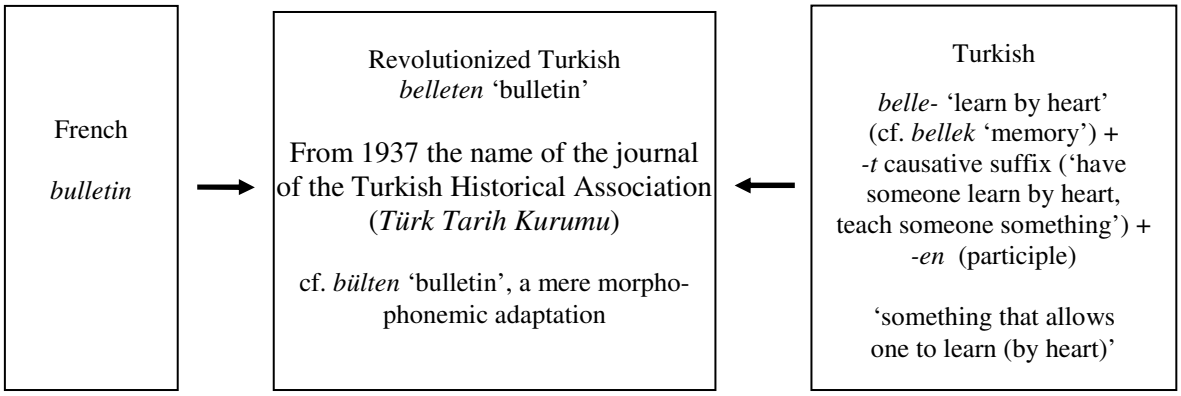

Figure 3

Perhaps the most famous Turkish PSM is the one whose current form is Turkish *okul* [oˈkulˤ] 'school' (cf. *OTED*:364 and Deroy 1956: 287). It was created to replace Ottoman Turkish *mektep*, an old loanword from Arabic (cf. Arabic مكتب [ˈmaktab] 'desk, office', 'a place where one writes'; Arabic كتاب [kiˈta:b] 'book'). Turkish *okul* was based on French *école* 'school' and might have been influenced by Latin *schola* 'school' (cf. the original Turkish coinage *okula(ğ)*, mentioned below). On the other hand, the autochthonous co-etymon of *okul* is Turkish *oku-* '(to) read', cf. *okumak* 'to read, study', *okuma* 'reading', *okur* 'reader'

(*OTED*:364). Note that the semantic affinity to Arabic كتب [ˈkataba] 'wrote (m, sg)', which is the ultimate origin of Ottoman Turkish *mektep*, and compare it also to (Rabbinic Hebrew>) Israeli בית ספר *bet séfer* 'school', lit. 'house of book'. However, synchronically, Turkish *okul* cannot be regarded as *öztürkçe* ('pure Turkish') since the final *-l* is not a Turkish suffix and was imported *ad hoc* from French. One might claim that the *-l* is a result of analogy to Turkish words ending in *l*, e.g. Turkish *kızıl* 'red, ruddy', from Turkish *kızmak* 'to get angry/hot'. There was also a suggestion that the suffix is in fact the Turkic *-ul*. However, adding the suffix *-ul* to *oku* would have yielded **okuyul* (cf. Lewis 1999: 118). Diachronically, however, the original form of Turkish *okul* allegedly was *okulağ* or *okula*, in which *-la(ğ)* might be explained by analogy to (Ottoman) Turkish *kışla* 'barracks, winter quarters' (cf. *kış* 'winter') and (Ottoman) Turkish *yayla* 'summer pasture' (cf. *yaz* 'summer'), although these two are not verb-based (ibid.: 117). Refet, the Deputy for the city of Urfa, falsely suggested that *okula* already existed in the Urfa dialect (ibid.: 118; cf. Heyd 1954: 91). Indeed, purists are likely to apply the method of revitalizing and standardizing dialectal words. However, in the case of Turkish *okul*, such an explanation seems to be no more than an *ex postfacto* rationalization. The following figure summarizes this PSM.

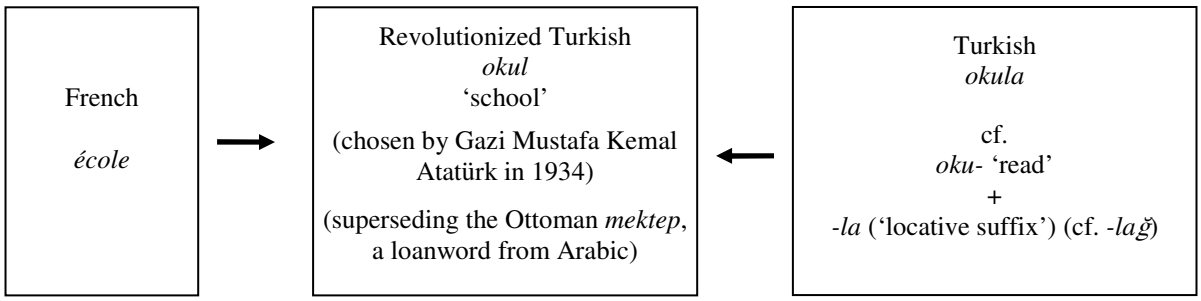

Figure 4

Turkish *okul* constitutes a successful creational PSM. As Lewis (1982: vi, reprint of 1953) puts it:

> Nothing is to be gained by adopting the ostrich-attitude and saying: '*Okul* ('school') is a ridiculous hybrid, out of the Turkish *oku-* 'to read', by the French *école*. We shall ignore it and continue to use the good old Ottoman word *mektep*.' Turkish children nowadays don't go to *mektep*; they go to *okul*.

2.2 Mandarin Chinese

MSC (Modern Standard Chinese) 声纳 *shēngnà* 'sonar' uses the characters 声 *shēng* 'sound' and 纳 *nà* 'receive, accept', as follows:

Figure 5

MSC *shēng* is a phonetically imperfect rendering of the English initial syllable. (Modern Standard) Chinese has a large number of homotonal/heterotonal homophonous morphemes, which would have been much better phonetically, but not nearly as good semantically. Consider *SONG* (cf. 送 *sòng* 'deliver, carry, give (as a present)', 松 *sōng* 'pine; loose, slack', 耸 *sǒng* 'tower; alarm, attract' etc.), *SOU* (cf. 搜 *sōu* 'search', 叟 *sǒu* 'old man', 馊 *sōu* 'sour, spoiled' and many others) or *SHOU* (cf. 收 *shōu* 'receive, accept', 受 *shòu* 'receive, accept', 手 *shǒu* 'hand', 首 *shǒu* 'head', 兽 *shòu* 'beast', 瘦 *shòu* 'thin' and so forth).

English (International) *Viagra* (the drug for treating impotence in men, manufactured by Pfizer) was domesticated in 1998 in MSC as 伟哥 *wěigē*, lit. 'great+elder brother', hinting at the erection of the Viagra user's penis ('brother'). *Viagra*, which was suggested by Interbrand Wood (the consultancy firm hired by Pfizer), was itself an MSN, based on Skt व्याघ्रः *vyāghráḥ* (m) 'tiger' (cf. Mayrhofer 1976: iii:274) but enhanced by ***vigour*** (strength) and ***Niagara*** (free/forceful flow). Note that 小弟弟 MSC *xiǎodìdì* 'little younger brother' can refer to the male organ, which might have facilitated the sexual connotation of 哥 *gē* 'elder brother', although in the Far East the distinction between a younger and an older brother is important. The following figure illustrates the linguistic process.

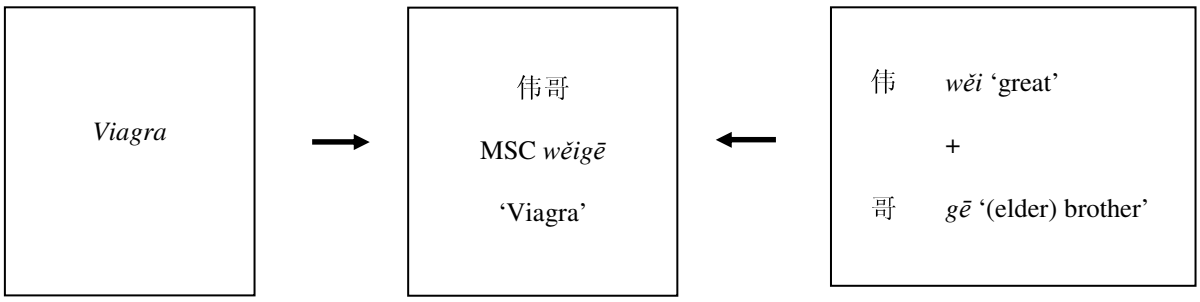

Figure 6

The Taiwanese have coined a parallel PSM, which some native speakers perceive as more suitable semantically, as follows:

Figure 7

2.3 Japanese

Japanese 背広 *sebiro* 'suit-jacket, blazer' (written in *kanji*), which was introduced in the nineteenth century, consists morphologically of two *kun-yomi* Japanese morphemes: *se* 'back (of the body)' (cf. 背 MSC *bèi* 'back (of the body)') and *biro* 'broad, wide', i.e. /hiro/ by the rule of *rendaku* (cf. Chinese 廣, cf. the simplified MSC 广 *guǎng* 'broad, wide'). *Rendaku* (or *sequential voicing*, Martin 1952: 48) is a morpho-phonemic, *sandhi*, intervocalic, sequential voicing, applied only to compounds, and more precisely to the first consonant of the second element in a compound (for discussion, see Vance 1987: 133-48). In fact, many suit-jackets have artificial shoulders which give the impression of a wide back, and a further semanticization could be that when one wears a suit, one maintains a straight posture and thus one's back looks wider. However, this is not the whole story. Japanese 背広 *sebiro* 'suit-jacket, blazer' also has a foreign co-etymon: *Savile Row*, the name of a street in London where exclusive tailor's shops are situated, thus constituting antonomasia (cf. *Armani suit*):[11]

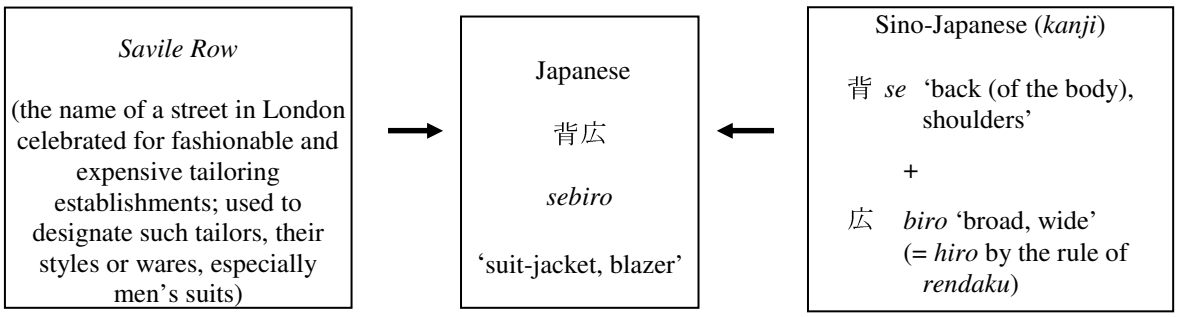

Figure 8

For a detailed discussion of PSM as exhibited in Turkish, Mandarin Chinese, Taiwan Mandarin, Japanese, Arabic and Yiddish, see Zuckermann (2000). Having examined the mechanisms governing PSM, however, let us now analyse the different linguistic features which predispose a language towards PSM (§3), as well as the various motivations for PSM according to language typology (§4).

3 Characteristics predisposing a language to PSM

Nil posse creari de nilo. (Lucretius, *De Rerum Natura*, Book I, l. 155)

3.1 'Phono-logographic script'

The Chinese writing system, which was developed as a 'morphemic script' (cf. Backhouse 1993: 47) more than 3,000 years ago, is used by Chinese (*Hànzì*), Japanese (*Kanji*) and Korean (*Hanja*). Whilst Chinese uses this script exclusively, Japanese and Korean also have syllabaries. Throughout history there have been different theories analysing Chinese orthography, all of which could be presented schematically as follows:

- *pleremic* (from Greek *plḗrēs* 'full', 'full of meaning'): *pictographic*, *ideographic*, *logographic*, *morphemic*. Of these, *morphemic* might be a better definition than *logographic* because, while in a logographic orthography each character (or logograph) represents a word as a whole (a semantic unit), in the case of Chinese, a compound-word like 灯泡 MSC *dēngpào* 'lightbulb' is written with two characters, representing two morphemes: 灯 *dēng* 'light' and 泡 *pào* 'bulb'.

- *cenemic* (from Greek *kenós* 'empty', i.e. 'empty of meaning'): *phonographic* and even *syllabic*; see *inter alios* DeFrancis (1984: 111ff). In the case of loanwords, Chinese characters are often used in a similar manner to a syllabary. Evidence that might support this observation is that sometimes the same foreignism has several distinct Chinese phonetic adaptations. Note also that native Chinese-speakers use characters phonographically when they attempt to write down a word whose exact characters are unknown to them.[12]

Traditionally, the most influential view has been the *pleremic*, and more specifically the *ideographic* one (cf. Suzuki 1975: 182). However, by now it seems that most linguists have rejected it. A harsh criticism of 'the ideographic myth' can be found in DeFrancis (1984: 133-148), Unger (1990, cf. 1987) and Frellesvig (1993). One of the main criticisms against the ideographic view is that characters of writing actually stand for linguistic units, not for ideas, and can therefore be either phonographic or logographic (or morphemic).

I believe that the Chinese orthography should be regarded as multivalent and often as *phono-logographic*. In other words, it can be both cenemic and pleremic simultaneously. This can be proved not only by the existence but also by the extent of PSM in Chinese. Such PSMs are modelled as closely as possible upon the sound of the SL word but the choice of characters (and therefore morphemes) used to render the sounds is determined by semantic criteria. The phonetic fidelity may be somewhat distorted in an attempt to use a character which is more appropriate semantically.

The main difference between Israeli and Chinese is that in Israeli there is the possibility of importing the Westernism as it stands, for example by morpho-phonemic adaptation, whereas in Chinese this is impossible: one can calque the Westernism or neologize, but one cannot import the sound without using indigenous characters which *ipso facto*, at least in theory, are associated with pre-existent morphemes. The use of Chinese characters is a necessity. However, which characters one chooses to use is an altogether different matter. This makes Chinese an incredibly fertile ground for PSM.

3.2 Semitic apophony: consonantal root system and discontinuous morphemic patterns

Morphologically, Israeli has dozens of possible noun-patterns, as well as verb- and adjective-patterns, which are discontinuous morphemes. They differ from each other in their vowels. Such a mechanism allows the phono-semantic matcher easily to find a pattern with a vowel sequence similar to that of the matched SL lexeme. This advantage can be seen in verbal morphemic adaptations into Israeli.

This morpho-phonetic advantage of Israeli could be compared with the Chinese (and Sino-Japanese) semantic inventory in which almost every foreign syllable can be phonetically adapted by a suitable meaningful Chinese syllable. In other words, the Israeli phono-semantic matcher enjoys a rich inventory from which to choose a morpheme (in this case, a noun-pattern or a verb-pattern) which fits the vowels of the matched SL lexical item. The Chinese nativizer, on the other hand, enjoys a rich

inventory from which to choose a morpheme (in this case, a lexeme) that fits the referent of the matched SL lexical item.

Thus, the coiner of MSC 雅虎 *yǎhǔ*, lit. 'elegant tiger', for *Yahoo* (the Internet service) could alternatively have used the following morphemes:

- 亚 *yà* 'inferior', 哑 *yǎ* 'mute, dumb, hoarse', 丫 *yā* 'bifurcation, fork', 涯 *yá* 'margin, limit', 牙 *yá* 'tooth', 鸭 *yā* 'duck', 压 *yā* 'press, push down', 呀 *yā* 'ah, oh (indicating surprise)', 押 *yā* 'give as security, mortgage', 崖 *yá* 'precipice, cliff', 芽 *yá* 'bud, sprout', 揠 *yà* 'pull up', 轧 *yà* 'roll, run over' etc.; as well as

- 忽 *hū* 'neglect, ignore', 壶 *hú* 'kettle', 乎 *hū* (expressing doubt), 呼 *hū* 'breathe out, exhale', 胡 *hú* 'non-Han nationalities living in the north and west in ancient times', 湖 *hú* 'lake', 糊 *hú* 'paste', 鹄 *hú* 'swan', 狐 *hú* 'fox', 弧 *hú* 'arc', 户 *hù* 'door', 护 *hù* 'protect', 互 *hù* 'mutual' and so on.

Similarly, the phono-semantic matcher of English *dock* (with Israeli מבדוק *mivdók*[13]) could have used – after deliberately choosing the phonetically and semantically suitable root (Biblical>Rabbinic Hebrew>>) Israeli בדק √*bdq* 'check' (Rabbinic Hebrew), 'repair' (Biblical Hebrew) – the noun-patterns *mi□□a□á*[14], *ma□□e□á*, *mi□□é□et*, *mi□□a□áim*[15] and so on. But s/he chose *mi□□ó□*, which is not highly productive. The reason is that the [o] in *mi□□ó□* makes the final syllable of the neologism (מבדוק ***mivdók***) sound like English *dock*.

Further examples of such phonetically-motivated choice of a specific noun-pattern in Israeli are תקע *téka* 'plug', which is fitted into the *□é□e□* noun-pattern (the final [a] is due to the voiced pharyngeal constituting the third radical), matching phono-semantically German *Stecker* 'plug' and Yiddish שטעקער 'id.' (The Hebrew root of תקע *téka* is תקע √*tqʕ* 'blow, insert'). This neologism was introduced or adopted by the Hebrew Language Council – see *Zikhronot Va'ad HaLashon* 5 (1921: 94).[16] Likewise, Israeli מסר *méser* is fitted into the *□é□e□* noun-pattern, matching phono-semantically English *message*, the Hebrew root of מסר *méser* being מסר √*msr* 'hand over, deliver, transmit'.

That said, cognitively, from the vantage-point of the speaker, due to the Semitic root system of Israeli, as well as to its apophonic morphology, the invariable – and hence important – elements in Israeli lexical items are the consonants rather than the vowels. The vowels provide the means for morphological integration, functionalization and grammatical information, but the basic referent is conveyed by the consonants. Hence the morphemic (or popularly 'consonantal') nature of Israeli

orthography, which, unlike the phonemic/phonetic spelling of the European languages, lacks vowels. Consequently, if two Israeli words share the same consonants in the same order, no matter what the vowels are, they are often conceived of by the native speaker as related. So, a PSM which could not be fitted into a noun-pattern whose vowels correspond to the SL lexeme is still linked to the SL lexeme. The Hebrew apophonic system resembles Indo-European *Ablaut* ('vowel gradation') as in English [s ng] ***si**ng-s**a**ng-s**o**ng-s**u**ng* and German [spr ch] *spr**i**cht-spr**e**chen-spr**a**ch-gespr**o**chen-Spr**u**ch* – cf. *Umlaut* ('regressive vowel assimilation') as in English [f t] *foot-feet* and [m n] *man-men*. However, *Ablaut* in modern Indo-European languages is far from having the variability, regularity and productivity of the Israeli apophony.[17]

Apophony is one of the most important Semitic features of Israeli. This phenomenon links Israeli with Semitic languages such as Arabic. In fact, the latter also makes use of apophony in nativizing alien terms phono-semantically in much the same way – albeit not to the same extent – as does Israeli. Consider the following examples:

- Arabic تقنيّ [ˈtaqni]/[ˈtiqani] 'technical, technological, technician', cf. Vernacular Arabic [ˈtiqani] and [ˈtiqni][18]

- Arabic تقنيّة [taqˈnijja]/[tiqaˈnijja]) 'technology, technique'

These terms derive from both the internationalism *technical* and Arabic √*tqn* ت.ق.ن. 'to master, improve, bring to perfection', cf. Blau (1981: 171-2). The Arabic root √*tqn* can be found in أتقن [ˈʔatqana] 'improved (m, sg)', إتقان [ʔitˈqa:n] 'perfection, thorough proficiency', متقن [ˈmutqan] 'perfect, professionally done, strong, finished up, improved' (often said about craft/art works), and تقن [tiqn] 'skilful, clever'.

It seems certain that Arabic √*tqn* ت.ق.ن. played a role here (hence this is a PSM) for two reasons. First, because of the semantic link between technique and artistic mastery, as well as – in the information age – between technology and perfection. Second, since the expected form in the case of a mere loanword in Modern Arabic would have used Arabic ك [k] rather than Arabic ق [q]. In fact, the Arabic morphemic adaptation of the internationalism *technique* is Arabic تكنيك [takˈni:k] rather than تقنيك *[taqˈni:k].[19] Similarly, the Arabic form of *technological* is تكنولوجيّ [takno:ˈlo:d͡ʒi] rather than تقنولوجيّ *[taqno:ˈlo:d͡ʒi]. See also Arabic ميكانيكيّ [mi:ka:ˈni:ki] 'mechanic, mechanical' and Arabic إلكترون [ʔilikˈtru:n] (Vernacular Arabic [ʔelekˈtro:n]) 'electron'.

If asked to analyse Arabic تقنيّ [ˈtaqni] morphologically, I would say that it consists of two morphemes: the adjective-pattern □*á*□□*i* and the root √*tqn*. Note that normally, Arabic □*á*□□*i* serves as an adjectival form of □*á*□□, the final [i] being ياء النسبة [ja:ʔ anˈnisba] (an adjectival suffix). Consider Arabic شمسيّ [ˈʃamsi] 'solar', from Arabic شمس [ʃams] 'sun', as well as Arabic أصليّ [ˈʔaṣli] 'original, primary, authentic, pure, real', from Arabic أصل [ʔaṣl] 'root, trunk (of a tree), origin, source'. However, this is not exactly the case with Arabic تقنيّ [ˈtaqni] since there is no such word as Arabic تقن *[taqn]. Hence, one might suggest that there is a morphological compromise here. Even if there is, it does not by any means weaken my PSM analysis.

A skeptical reader might object to my argument that Arabic تقنيّ [ˈtaqni] is a PSM, by adducing a non-PSM example of transposing a foreign [k] into Arabic ق [q]: Arabic قمرة [ˈqam(a)ra] 'berth, bunk, cabin, stateroom', which is traceable to Italian *camera* 'room'. However, I would like to suggest three possible explanations for the choice of [q] over [k] in this case:

(i) Differentiation from Arabic كمرة [ˈkamara] 'glans, the head of the penis'.

(ii) Arabic قمرة [ˈqamara] 'cabin' is an 'orthographic phonetic matching' using Arabic قمر [ˈqamar] 'moon', cf. Arabic قمريّ [ˈqamari] 'lunar' (on 'orthographic folk-etymological nativization', see Zuckermann 2000: 161-3).

(iii) Unlike the relatively modern Arabic تقنيّ [ˈtaqni] 'technical', Arabic قمرة [ˈqamara] 'cabin' was introduced in the Middle Ages, when a non-aspirated [k] – as in Italian *camera* – was transcribed as ق [q]. Consider also Arabic سقراط [suqˈra:ṭ] 'Socrates' and Arabic بقراط [buqˈra:ṭ] 'Hippocrates', as well as Arabic قلقديس (ال) [(ʔal)qilqidi:s], from Greek χαλκιτῖδες *khalkitîdes* 'rock alum' (a kind of metal) (genitive), and Arabic هبوقسطيداس (ال) [(ʔal)hibu:qisṭi:da:s] from Greek ὑποκιστίδας *hupokistídas* '*Cytinus hypocistis*' (a kind of plant).[20]

To sum up, then, we have seen that in addition to its unique historical and sociological circumstances, Israeli possesses basic Semitic morphological characteristics – shared by Arabic too – which make it particularly conducive to PSM. At the same time, Israeli's apophonic morpho-phonetic flexibility is analogous to the rich orthographic inventory of languages such as Chinese, which use a phono-logographic script.

4 Comparative analysis of motivations for PSM across language typological categories

Similia similibus curantur. (The basic principle of homeopathy)

From a puristic point of view, which prefers native elements to those of alien pedigree, PSM is the ideal means of filling a *native lexical void* or, in other words, of replacing an unwelcome loanword (or '*mutuatio non grata*', my term). To this end, PSM possesses the following main advantages: (1) For the native speaker of the future: *camouflaging foreign influence* (using autochthonous constituents); (2) For the reinventer: *recycling obsolete lexemes*; (3) For the contemporary learner: *facilitating initial learning* (mnemonization).

Let us begin with Advantage (1): A PSM is an indigenous word which is morphologically 'pure' and therefore has a high level of lexicographic acceptability. This then allows the purist to 'kill the (foreign) messenger'. No one can accuse Alterman (1963: 43), who uses סלוד *silúd* to mean 'salute',[21] of borrowing, since סלוד *silúd* derives from Medieval Hebrew סלוד [silˈlūd] 'awe, glory', from סלד √*sld*, and therefore can be regarded as a word with an impeccable Hebrew pedigree. Clearly, however, the modern sememe 'salute' is an imitation of the internationalism *salute* – cf. Yiddish סאַלוט *salút*, Russian салют *salyút*, Polish *salut* (the latter usually means 'cannon-fire as a mark of respect', cf. Polish *salutowanie* 'salute (n) (with the hand)', from Polish *salutować* 'to salute'), and (the orthography of) French *salut*. Alterman was not the first to use סלוד *silúd*; it appears in *Davar* (17 June 1934), *Milón leMunekhéy haHitamlút (Dictionary of Gymnastics Terms)* (1937: 96, Item 1218) and Avinery (1946: 143). Meltzer (1966: 78) uses סלד *séled* 'salute', a PSM which is a variant of סלוד *silúd*.

Regarding Advantage (2), PSM allows for the application of חשיפת גנוזות *khasifát gnuzót* 'rediscovery of hidden words' or إستنباط [ʔistinˈbaːṭ] 'discovering, producing, deducing' (see Blau 1981: 163), i.e. the adaptation of archaic words to the modern world. Sivan (1966: 200 = 1995: 26) calls such words מלים מתנערות *milím mitnaarót* 'awakening words'. Bar-Asher (1995: 8) terms the process of recycling obsolete lexical items עקרון השאיבה מבפנים *ekrón hasheivá mibifním* 'The Principle of Drawing from Within' (also mentioned in *Akadém* 8, March 1996, p. 3), corresponding to the view expressed by Pines (1893: 61): *hagdolá shebamaalót lemilá khadashá – im enéna khadashá* 'The greatest virtue

of a new word is that it is not new', and to that of Klausner (1940: 289): *kedéy lekhadésh tsaríkh limtsó milá yeshaná, sheyésh la shóresh ivrí, sheyésh la tsurá ivrít, sheyésh ba táam ivrí* 'In order to neologize one should find an old word, which has a Hebrew root, a Hebrew form and Hebrew stress'. In response to Ben-Yehuda's rebuke of not having neologized enough Aaron Meyer Mazia said:[22]

> *Not only am I unashamed of it but I am in fact satisfied that the [Hebrew Language] Council decided on numerous words for athletics, arithmetic, dresses and the like, but that the majority of these words were nothing but old words […] we would not want to create new words as long as we are able to satisfy our needs with what is available from our ancient literature.*

Thus, PSM is often used to resurrect obsolete words, as in Israeli תיר *tayár* 'tourist':[23]

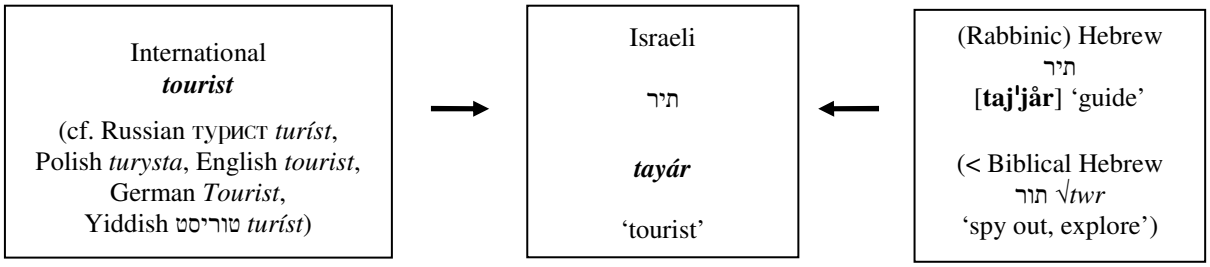

Figure 9

Consider also תיר *tiyér* 'toured, was a tourist (m, sg)', which is either a secondary derivation from תיר *tayár* 'tourist' or a resuscitation of Medieval Hebrew תיר [tij'jer] 'guided (m, sg)' (from תור √*twr*).

Concerning the benefit to the contemporary learner (Advantage 3), as Avinery (1946: 137) said:

> כל כמה שצליל המלה הזרה קרוב לצליל המלה הלאומית – כן נוחה קליטתה בלשון וכן נוחה היא להדרש כמלה מקורית ואף להשפיע על שנוי משמעותן של מלים קימות.
>
> The more similar the sound of the foreign word is to the sound of the national word, the easier its absorption in the language is, and the more easily it can be interpreted as an original word and even influence changes of meaning in existing words.

At first glance, Advantages (1) and (3) might seem to be in contradiction with one another since while (1) suggests that the matched SL lexeme is camouflaged, (3) implies that the matched SL lexeme will participate in facilitating the successful entrance of the PSM into the language. I propose two possible solutions to this apparent difficulty. First, complementary distribution: these advantages were not consciously or actively used by the same coiner simultaneously. Second, in the case of

Israeli, wishful thinking: the coiner used both advantages consciously or actively, bearing in mind that Advantage (3) would serve only a contemporary learner of the emerging Israeli language, whereas Advantage (1) would serve only the native speaker of the Israeli of the future; after all, especially during the dawning of Israeli, the vision was to create a language for future generations.

Advantages (1) and (2) are apparent in PSMs introduced during the Turkish 'language revolution' (*dil devrimi*, Ottoman Turkish *lisan inkılâbı*), which was put into action in 1928-36 by Mustafa Kemal Atatürk, also known as Gazi ('champion, warrior') Paşa. The similarity between these Turkish PSMs and those in Israeli lies in the fact that in both cases most of the neologisms are a result of deliberate, institutionalized fabrication by language planners, in contradistinction to spontaneous folk-etymological creations introduced by anonymous laymen. Still, in both Turkish and Israeli the methods used by the purists are technically folk-etymological. In fact, Atatürk himself was an amateur etymologist and often Turkicized Western words folk-etymologically. The following have been attributed to him: • *Ne yaygara* 'Niagara' is morphologically based on Turkish *ne* 'what (exclamatory)' and Turkish *yaygara* 'howl, shouting, hullabaloo, fuss' and thus means 'What tumult!' (Lewis 1999: 43), 'What a noise!', the instinctive response of some visitors to the Niagara Falls. • *Ama uzun* 'Amazon' derives from Turkish *ama* 'but, still; really, truly' and Turkish *uzun* 'long' and thus constitutes 'But it is long!' (ibid.), 'How long!' (surprised) (cf. Colloquial Turkish *amma* 'how', an exclamation expressing surprise, 'but, still').

However, with respect to Advantage (1), there is a crucial difference between some Turkish PSMs and Israeli ones: the former involve the reanalysis of a foreign term as if it were Turkish rather than the adaptation of a foreign term into Turkish. This '*Istanbul caput mundi*' attitude corresponds to the *Güneş-Dil Teorisi* 'The Sun Language Theory' (on the latter, see, *inter alia*, Lewis 1999). I am not arguing that '*Hierosolyma caput mundi*' theories have not existed among linguists in *Eretz Yisrael* (see, for example, Slouschz 1930), but, indubitably, they have never gained as much success as in Turkey. As Atay (1965) claims, Atatürk did not mind the Turkish Language Society leaving foreign words in the language, so long as it could demonstrate that they were in fact Turkish. If the Sun Language Theory proves that all languages stem from Turkish, every so-called 'foreignism' ceases to be a foreignism, and thus is no longer a threat. It is possible that the theory was adopted by Atatürk precisely in order to legitimize the Arabic and Persian words which the language revolutionaries did not manage to uproot. Note that Atatürk was particularly concerned with ridding Turkish of the Arabic/Persian components, but did not mind too much

about the influence of French (which he knew well). In other words, he was anti-Arabic/Persian rather than 'purist' in the traditional sense.

Most PSMs in Israeli were created puristically, in an attempt to camouflage a foreignism or to ensure lexicographic acceptability. However, some PSMs were a result of sheer playfulness. In fact, PSMs in Hebrew, Yiddish and Israeli can be linked to the Jewish midrashic tradition of homiletic commentary on the Hebrew scriptures, in which punning, or use of coincidental similarity between distinct words, was employed in the service of interpretation. In later generations too, word-play has been a conspicuous feature of Jewish oral argumentation (cf. *pilpul*) – for discussion see Harshav (1993).

Furthermore, many PSMs are a result of the 'conventional' popular etymology, the lay craving for meaningfulness. First, consider the perception of naïve young Israeli readers of דוקטור סוס *dóktor sus* (cf. English *Dr Seuss* [ˈdɒktə(r) su:s]), the pseudonym of Theodore Seuss Geisel, American author and illustrator of children's books (1904-91). Many Israelis are certain that he is 'Dr Horse' since (Biblical Hebrew>>) Israeli סוס *sus* means 'horse'. I have heard a popular etymologization according to which this arises from the prevalence of animals in Dr Seuss's stories. This 'misunderstanding' might correspond to Haugen's general claim with regard to borrowing, that 'every speaker attempts to reproduce previously learned linguistic patterns in an effort to cope with new linguistic situations' (1950: 212). But whilst the popular etymology in *dóktor sus* is only derivational (I call this DOPE, Derivational-Only Popular Etymology), there are many cases of generative popular etymology (GPE) which result in lay PSM. For example, the obsolete Colloquial Israeli קשור תאוזניים *kshor taoznáim*, lit. 'Tie the ears!', meaning 'Go to hell!', was a lay PSM of the Russian exclamation чёрт его знает *chërt egó znáet* (pronounced *chort yevó znáyet*), lit. 'The devil knows him/it!', used as 'God knows!' or 'The devil only knows!'. Note the semantic modification of the Russian expression within Israeli, most likely induced by Russian curses which also use чёрт *chërt* 'devil'. Dozens of further lay PSMs in Israeli and many other languages can be found in Zuckermann (2003).

As far as phono-logographic languages are concerned, a similar set of both puristic and popular motivations for PSM can be detected. At first sight, one might think that a difference between Israeli and MSC (and Japanese) is that whereas the first speakers of Israeli were not monolingual, most Chinese- (and Japanese-) speakers are. *A priori* – setting aside the phono-logographic script which is highly conducive to PSM – this fact should lead one to assume that PSM would not be that common in

MSC. However, my research uncovered hundreds of Chinese PSMs. It indicates that in addition to general usage, PSM in MSC is widespread in three main terminological categories: **(i)** (commercial) brand names (and hence antonomasias), **(ii)** computer jargon**,** and **(iii)** technological terms. It is no coincidence that these are precisely those areas suffering from native lexical lacunae, as well as being fields in which (educated) Chinese-speakers can be expected to have knowledge of foreign lexical items. Thus, monolingualism is not a serious obstacle to PSM in MSC, after all.

Because the original International/American term is generally familiar, for example in the field of computers (e.g. *Pentium*), Chinese coiners prefer not to calque it or introduce an indirectly related neologism. Rather, they resort to camouflaging the foreignism by ensuring its nativization through PSM (cf. Advantage 1 above). The other written option here would be to use roman transcription, whilst the other oral option would be to mimic the American pronunciation (cf. code switching). Thus, PSM in MSC seems to be a case of choosing the 'lesser evil' (given that the coiner is interested in retaining a similar sound to the SL expression).

In the case of brand names, there are additional motivations involved. First, the desire to attract customers with a catchy name, which will be easy to remember (cf. Advantage 3 above). Second, the wish to exploit many speakers' belief that there is something intrinsic about the sound of proper names. This very same motivation is exemplified by the long-standing pre-MSC tradition of phono-semantically matching country names.[24] A classic example is 美国 MSC *měiguó*, a PSM of *America*, consisting of 美 *měi* 'beautiful, pretty' and 国 *guó* 'country, state'; cf. Cantonese *meiko(k)*.[25]

In many Chinese toponymic PSMs (and my lists include dozens), the characters were chosen on the basis of political expediency, mostly to be flattering to the country whose name was being matched, i.e. they were *politically correct*. Contrast 美国 MSC *měiguó* 'America' with the pseudo-Aramaic, Modern Hebrew witticism עמא ריקא (Israeli *amá reká*), lit. 'empty nation', which was utilized in some Hebrew texts to ridicule *America*, cf. עמא ריקה in the opening page of Gershon Rosenzweig's satirical *Massékhet Amérika (Tractate America)* from the collection *Talmud Yanka'i*, which was published in Vilna in 1894 – cf. Ben-Yishai (1971: 127); for discussion, see Zuckermann (2002, 2004) and Nissan (ms). This expression was modelled after Rabbinic Hebrew (Aramaic) עמא פזיזא [ʕamˈmå pəzīˈzå], lit. 'hasty nation', which appears in the *Talmud*: Kethuboth 112a, referring to the youthfully thoughtless Israeli nation.[26]

The above examples, ranging from Israeli to Mandarin, demonstrate that various motivations for PSM, cultural and structural, lay and scholarly, occur consistently across diverse language typologies. The universality of these motivations leads us to examine the theoretical and cultural implications of multisourced neologization.

5 Theoretical and cultural implications

> *Alle Dinge, die lange leben, werden allmählich so mit Vernunft durchtränkt, dass ihre Abkunft aus der Unvernunft dadurch unwahrscheinlich wird. Klingt nicht fast jede genaue Geschichte einer Entstehung für das Gefühl paradox und frevelhaft?* [27]
>
> (Nietzsche 1881: Book I: Section 1, cf. 1971: V:i:15)

5.1 Popular etymology

> פוק חזי מאי עמא דבר
>
> [pūq ħăzī maj ʕammå dəḇar]
>
> 'Go out and see how the people conduct themselves' (Aramaic, *Talmud*: B'rakhoth 45a)

Despite significant recent developments in the study of popular etymology, for example, within cognitive and cultural linguistics (e.g. Holland and Quinn 1987, Coates 1987, Sweetser 1990), some linguists still regard any study related to folk-etymology as 'boudoiresque' or apocryphal. As shown by my discussion of the importance of popular etymology in multisourced neologisms, it is time to overcome this prejudice and to realize that popular etymology shapes speakers' perceptions and the connotations of words, and thus influences people's actual lives. Consider, for example, the tradition in some western Ashkenazic Jewish communities of eating cabbage soup on Hoshana Raba (the seventh day of the Sukkoth holiday, when each person's fate for the coming year is irrevocably sealed in Heaven). The reason for this is that the name of the Jewish prayer recited on this occasion, Hebrew קול מבשר, lit. 'a voice announcing', pronounced in Ashkenazic Hebrew *kol meváser*, was playfully reinterpreted as Western Yiddish קאָל מיט וואַסער *koul mit vásər* (cf. Yiddish קאָל מ' וואַסער *kol m' vásər*) 'cabbage with water', cf. German *Kohl mit Wasser* (cf. Weinreich 1973: i:7, 192). Consider also Swedish *Vår fru dagen*, lit. 'Our Lady's Day', which used to be the signifier for Lady Day (25 March), the Feast of the Annunciation of the Blessed Virgin Mary. This is allegedly the day on which the Virgin Mary was told that she was going to give birth to Jesus – exactly nine months before Christmas. Throughout time Swedish *Vårfrudagen* has been reinterpreted as *Våffeldagen*, lit. 'Waffle

Day'. Consequently, on that day Swedes traditionally eat waffles with jam or cream. The waffles are sometimes heart-shaped, and those who still know about the connection with the Virgin Mary might rationalize the form in terms of the Virgin Mary's heart. Such shifts in reality alone render popular etymology a worthy subject for research.

Naphtali Herz Torczyner, who acted as the last president of the Hebrew Language Council (1942-9) and the first president of the Academy of the Hebrew Language (1953-73), wrote in 1938:

> קדמוננו דרשו כתב הנשתון 'כתב שנשתנה', חילקו את המלה פת-בג לשתיים ומצאו בה את המלה העברית פת 'לחם', וכדומה. דרשות אלו רחוקות הן מן האמת הבלשנית כמו הדרשות שטיפלו גם בשמות הפרטיים הפרסיים שבתורה, עד שנעשׂה שם בנו של המן הרשע פרשנדתא לשם תפארת בשביל רש"י 'פרשן הדת' המפורסם. אין אלו אלא משׂחקי מליצות ולא לשון חיה ואמיתית.
>
> Our ancestors interpreted *ktav hanishteván* as 'script that has been changed' [mislinking *nishteván* with *nishtaná* 'changed'], divided the word *pat-bag* into two and found within it the Hebrew word *pat* 'bread', and so on. These homiletic interpretations are far from the linguistic truth, in the same way as the interpretations of the Persian proper names in the Old Testament, so that even the name of the son of Haman the Wicked, *Parshandáta*, became a name of glory, the famous *parshán hadát* ['interpreter of religion'], for Rashi. These are nothing but rhetorical games [cf. *melitzah*, an intertextual citational style] and not part of the living and true language.
>
> (Torczyner 1938: 8)

Whilst I agree that such 'homiletic interpretations are far from the linguistic truth', such 'games of rhetoric' are, in fact, an integral part of the 'living and true language'. In an article punningly entitled בלשנות ובטלנות *balshanút uvatlanút* (i.e. 'Linguistics and Idleness'), Torczyner – after phonetically matching his surname to Tur-Sinai (lit. 'Mount Sinai) – scorns laymen who think that German *privat* is derived from Hebrew פרטי (Israeli *pratí*) 'private' (see Tur-Sinai 1950: 5). While Tur-Sinai's criticism is etymologically justified, he does not think to ask whether such coincidental similarity can actually affect language itself, and not only meta-language. Thus, the internationalism *private* increased the use of (Hebrew>) Israeli פרטי *pratí* 'private'. Torczyner, like many other good linguists, is blinded by an indoctrinated linguistic desire to repremand laymen for linguistic ignorance. The result is insensitivity, neglecting the fact that the subject of the matter, language, is, after all, spoken and shaped by these very laymen.

The linguistic analysis of popular etymology should not restrict itself to discussing cases of mistaken derivation because popular etymology often results in a new sememe/lexeme, as we have seen in the PSMs analysed throughout this paper. Most importantly, folk-etymological methods are often employed by very august, scholarly, puristic language planners, especially within the highly prescriptive Hebrew Language Council and the Academy of the Hebrew

Language – both headed at different stages by Torczyner/Tur-Sinai himself, as well as by puristic Turkish language revolutionizers. The following is an example of a recent creational PSM, which was officially introduced on 22 May 2000 in Session 254 of the Academy of the Hebrew Language: Israeli אקוה *akvá* 'aquifer, reservoir of underground water' is based simultaneously on **(i)** the internationalism ***aqui****fer* and **(ii)** (Biblical) Hebrew קוה √*qwh* 'collect/gather (water)', cf. (Biblical Hebrew>>) Israeli (מים) מקוה *mikvé máim* 'watering hole, reservoir, collection (of water), *mikveh*', and Biblical Hebrew מקוה [miqˈwå] 'water reservoir'. Thus, the distinction between *créations savantes* and *créations populaires* is not so categorical since many *créations savantes* are in fact '*populaire*' and many *créations populaires* are indeed '*savant*'.

PSM is a form of camouflaged borrowing which differs from other externally based sources of lexicon-enrichment such as unassimilated borrowing, phonetic adaptation, morphemic adaptation and calquing. PSM, which usually goes unnoticed by unsophisticated speakers (especially those of later generations), has introduced a substantial number of new sememes and lexemes in Israeli, as well as other languages such as Turkish, Chinese, Japanese and Yiddish itself (see Zuckermann 2000). In the case of Israeli, it reinforces the view that Israeli has been covertly dependent on Germanic and Slavonic languages, mostly Yiddish, but also Russian, Polish, German and English. The examples presented in this paper (polychronically analysed), as well as the dozens more discussed by Zuckermann (2000), prove that PSM is significantly widespread, the extent being remarkable both in absolute terms (200 PSMs out of several thousand neologisms) and in relative terms, i.e. taking into account the fact that the majority of SL words do not have a parallel TL element which may coincide on both phonetic and semantic levels. Such a constraint does not usually apply to calquing, morpho-phonemic adaptation and mere neologization. Hence 200 PSMs in Israeli (over and above their hundreds of secondary derivatives, as well as many toponyms and anthroponyms – see Zuckermann 2000) is a significant number.

Discussing Turkish examples of PSM, Deny (1935: 246) claims that such neologisms are entirely 'without precedent in the annals of linguistics'. This paper corrects that statement. Furthermore, Heyd (1954: 92) says that 'Modern Hebrew, too, tried, *for a short period and without much success*, to follow the same road, forming words like *khòlirá* [חולירע, lit. 'bad disease'] for *cholera*, *pràtey-kól* [פרטי כל, lit. 'details of everything'] for *protocol*, etc.'. Heyd underestimates the power of PSM. The cases collected and analysed throughout Zuckermann (2000) clearly

show that PSM is an important phenomenon. It is difficult to provide a detailed chronology of the specific periods in which Israeli PSMs were favoured. However, throughout the Hebrew 'revival', PSM was a very common method of neologization. For example, it was used heavily by (1) Shalom Abramowitsch (a.k.a. Mendele Móykher-Sfórim, 1835-1917), the 'Grandfather of Israeli' and the father of modern literary Hebrew (on the crucial role of Mendele in the formation of Israeli, see Patterson 1962 and Kutscher 1982: 190ff, as well as Zuckermann 2000, 2003); (2) Eliezer Ben-Yehuda (1858-1922), the 'Father of Israeli', whose interest in Hebrew and Zionism began after he had read *Daniel Deronda* (1876), George Eliot's Zionist novel, thus providing a Judaic channel for his Russian nationalism and Slavophilia, which had in turn been created under the influence of the Russo-Turkish war in the Balkans in 1877-8, cf. Harshav (1993: 55).

Opposition to PSM arose later on (see Zuckermann 2000: 148-9), but, as we have just seen with Israeli אקווה *akvá* 'aquifer', PSM is still widely used by the Academy of the Hebrew Language today. This paper shows the power of *serendipity*: coincidental phonetic similarity induces PSM, which might result, among other things, in the revival of an obsolete morpheme (e.g. root, noun-pattern) or lexeme.

5.2 Camouflage linguistics

This paper offers a new avenue of linguistic research, one which focuses on camouflaged interactions between languages. [28] The influence of folk-etymological camouflaged borrowing does not end with the PSM itself since the latter often produces dozens of secondary (and tertiary) derivatives. Consider Israeli מכונה *mekhoná* 'machine', a PSM by semantic shifting of the internationalism *machine*, based on Biblical Hebrew מכונה [məx̱oˈnå] 'base' (e.g. I Kings 7: 27, 30, 35; Ezra 3:3). This PSM has resulted in a secondary root, מכנ √*mkn* '(to) machine, add machines, mechanize', and in many nouns, e.g. מכונית *mekhonít* 'car' (coined by Itamar, Ben-Yehuda's son, in 1911, cf. Sivan 1981b: 16; Ben-Avi 1951; most probably a nominalization of the adjective in עגלה מכונית *agalá mekhonít* 'automobile', lit. 'mechanical wagon', as opposed to עגלה חשמלית *agalá khashmalít* 'tram', lit. 'electric wagon', cf. Sivan 1978: 213), מכונאות *mekhonaút* 'mechanics', מכונאי *mekhonáy* 'mechanic'.

Dealing with Israeli, some linguists regard morphology as the study of noun-patterns, verb-patterns and affixes, while the study of roots is a part of

etymology. The beauty of PSM is that Yiddish, as well as other non-Semitic languages, not only dictates the choice of root but also the choice of noun-pattern. Thus, the □*é*□*e*□ noun-pattern was chosen for תקע *téka* 'plug' (cf. §3.2) and מסר *méser* 'message' in order to imitate the sound of German *Stecker* / Yiddish שטעקער *shtékər* 'plug' and English *message* respectively.[29] Israeli להיט *lahít* (puristically *lehít*, but this form is already used by Israelis as a clipping of להתראות *lehitraót*, lit. 'to see each other', i.e. 'goodbye') 'hit, popular song' is fitted into the □*a*□*í*□ (cf. □*(ə)*□*í*□) noun-pattern because of English *hit*. Furthermore, מבדוק *mivdók* 'dock', which was obviously motivated by the wish to maintain the sound of *dock*, might have improved the productivity of the *mi*□□*ó*□ noun-pattern. Thus, PSM can act as a filter dictating which linguistic element will endure. Such a process has huge theoretical importance since it implies that the survival of some morphemes (in this case suffixes, noun-patterns and verb-patterns) is determined by parameters outside the language itself. Similar is the preference for a certain verb-pattern or noun-pattern in order to preserve the SL cluster. More specifically, the Hebrew □*i*□*é*□ verb-pattern is the most productive verb-pattern in Israeli because it makes it possible to preserve foreign clusters.

5.3 Linguistic gender

Trudgill (1998), *inter alios*, compares linguistic gender to male nipples, implying that it has neither purpose nor function. Although his analogy is flawed (since the male nipple is an erogenous zone for many men), most linguists might agree with his general intent. However, 'camouflage linguistics' can prove that diachronically, linguistic gender can make a difference. Consider the common Israeli מברשת *mivréshet* 'brush' and the obsolete Israeli משׂערת *mis'éret* '(originally) brush, (later) soft brush consisting of long hair', both of which are feminine. I believe that the choice of the feminine noun-pattern *mi*□□*é*□*et* was induced by the gender of Yiddish בּאַרשט *barsht* (f), German *Bürste* (f) and French *brosse* (f), all meaning 'brush'; cf. Vernacular Arabic مبرشة [ˈmabraʃa] / [ˈmabraʃe] (f) 'grater', Russian щётка *shchétka* (f), Polish *szczotka* (f) 'brush' and Russian кисть *kist'* (f) 'painting brush'. The table below presents the various forms:

Table 1

Israeli	Arabic	English	Yiddish	Russian	Polish	German	French
מברשת *mivréshet* (feminine)	مبرشة [ˈmabraʃa] (feminine)	*brush*	באַרשט *barsht* (feminine)	щётка *shchëtka* (f); кисть *kist'* (f) 'painting brush'	*szczotka* (feminine)	*Bürste* (feminine)	*brosse* (feminine)

Note that although the *mi□□é□et* noun-pattern is indeed used for instruments, there were other possible suitable noun-patterns, consider מברש **mavrésh* and מברש **mivrásh* – both masculine. One might say that the choice of the *mi□□é□et* noun-pattern (resulting in מברשת *mivréshet*) was induced by the [t] (the sound of ט) of Yiddish באַרשט *barsht* 'brush'. However, this does not weaken the hypothesis that the gender played a crucial role since Ben-Yehuda's original form of this coinage was Israeli מברשה *mivrashá*, fitted into the *mi□□a□á* noun-pattern, the latter lacking [t] but still feminine. Israeli מברשת *mivréshet* came later.

Similarly, Israeli ספריה *sifriá* 'library' was preferred to בית ספרים *bet sfarím*, lit. 'house of books'. Some intra-Israeli reasons might have been the wish to (a) rid Israeli of *maskilic* (Enlightenment) compounds, (b) streamline the word for convenience, or (c) prevent a possible confusion with בית ספר *bet séfer*, lit. 'house of book', referring to 'school'.[30] However, there was also a camouflaged external reason: ספריה *sifriá* is feminine, thus maintaining the gender of the parallel European lexical items – cf. Yiddish ביבליאָטעק *biblioték* (f), Russian библиотека *bibliotéka* (f), Polish *biblioteka* (f), German *Bibliothek* (f) and French *bibliothèque* (f). Perhaps the feminine gender of Arabic مكتبة [ˈmaktaba] 'library' played a role as well. One might say that this camouflaged foreign influence is only lexical. However, one of the results of this mere neologism might have been, more generally, the strengthening of Israeli יה- *-iá* as a productive feminine locative suffix (consider also the combined influence of Polish *-ja* and Russian -ия *-iya*) and – most importantly – the weakening of the productivity of the construct state (*smikhút*), which is also reinforced by the general transition from a synthetic to an analytic structure, e.g. *ába sheli*, is currently more common that *aví*, both meaning 'my father'. Future research should be conducted on 'Camouflaged Grammatical Borrowing: Language Contact and Linguistic Gender'. One direction could be the analysis of the linguistic gender of borrowings in immigrant societies. For example, morphemic adaptations of English words into American Italian or British Italian often carry the gender of the parallel word in Italian itself, e.g. British Italian *bagg**a*** 'bag' (f), induced by Italian *bors**a*** 'id.' (f). The reverse

phenomenon often occurs, for example when an Italian-speaker subconsciously 'changes' the gender of pre-existing words in Israeli according to the Italian parallels.

5.4 Classification of borrowing

PSM does not (only) involve induction but rather borrowing. However, it does not fall discretely into either of the traditional categories of borrowing, which are substitution and importation. Therefore, a radical change in such classifications of borrowing is needed. Not only should PSM be added to the traditional classifications but, in this era of globalization and widespread communication in general and of internationalisms and 'reinvented' languages in particular, the categories of borrowing also need to be redefined.[31]

Haugen, although written as long ago as 1950, is considered by some to have presented the most complex typology of lexical borrowing (cf. Appel and Muysken 1987: 164). He did indeed manage to create order within the earlier confusing terminology. However, his treatment has the following shortcomings with regard to PSM:

1. OMISSION: Despite the fact that PSM is a common source of lexicon-enrichment derived from language contact,[32] it is hardly mentioned in Haugen (1950). He only briefly discusses 'semantic loan' (1950: 214), which is related to only one specific category of PSM, namely 'phono-semantic matching by semantic shifting', thus excluding, for example, the creational PSM משקפים *mishkafáim* 'glasses' (see §1). Furthermore, he seems to have had in mind only one of many cases belonging to this category; namely that in which the semantically shifted TL lexical item is a (surface) cognate of the SL word. Consider the following:

   - (American) Portuguese *humoroso* 'capricious' changed its referent to 'humorous, funny' owing to the English surface-cognate *humorous* (Haugen 1950: 214), cf. Portuguese *humoristico* 'humorous'.
   - French *réaliser* 'actualize, make real' is increasingly used to mean 'realize, conceive, apprehend' – induced by English *realize* (Deroy 1956: 59), which derives from Italian *realizzare* or from the original French *réaliser*.
   - French *toster* 'grill, roast' took on in 1750 the additional sense 'drink in honour of (a person or thing)' – influenced by English *toast* (Deroy 1956:

62), which goes back to Old French *toster* (twelfth century; *Oxford English Dictionary*). Only in the nineteenth century did *toster* 'drink in honour of' begin to be spelled *toaster*.

Even the term 'semantic loan', as Haugen himself admits, is flawed, since according to his use of 'semantic', all the other loans are also semantic (the TL lexical item preserves the meaning of the SL lexical item), the only difference being that in the case of the so-called 'semantic loan', the only *detectable* evidence of borrowing is its new meaning.

2. INAPPROPRIATE CATEGORIZATION: A much more serious problem than the aforementioned neglect of PSM is the fact that PSM does not fall within Haugen's main types of borrowing – substitution and importation – since PSM is a special case of simultaneous substitution and importation.

5.5 Historical contact linguistics

PSM is a biparental creation, which operates outside the conventional laws of sound change. Thus, it should be taken into consideration alongside these laws. This paper develops a *polychronic* (i.e. both diachronic and synchronic) method of lexical analysis, combining philological work with a sociolinguistic approach. One might argue that my use of *polychronic* is similar to that of the already-existent *diachronic* in its broad sense since the latter *ipso facto* includes synchronic analysis. However, traditional philology is often not interested in the culturally motivated intermediate stages of the modern lexical items it analyses. As the study of PSM shows, there is a serious need to record not only the earliest documentations, but also the socio-cultural background and inter-cultural context of neologisms. I believe that polychronicity should also be the model for linguists dealing with any other aspect of language change.

When one encounters a lexical item which is similar in both meaning and sound to a word in another language, the following possible analyses have traditionally been available: (i) the two words are real cognates; (ii) one word was borrowed from the other (as foreign word, loanword, phonetic adaptation or morphemic adaptation); (iii) they are both independently a result of onomatopoeia; (iv) the phonetic similarity is mere coincidence. This paper adds another possibility: (v) one word is a PSM of the other.

Whilst foreign influence in syntax and morphology is concealed, it is commonly considered to be transparent in the case of lexicon. This paper, however, proves that vocabulary itself can conceal foreign impact effectively.

6 Conclusion

We have seen that, with regard to *language typology*, PSM is widespread in two categories of language: **(i)** 'reinvented' languages, in which language planners attempt to replace undesirable loanwords; and **(ii)** languages using phono-logographic script. An additional category is **(iii)** minority languages or those spoken by stateless cultures. Whilst PSM in (i) and (iii) is mainly motivated by sociolinguistic factors, the major incentive for PSM in (ii) is orthography, which I regard as language-internal. Israeli, specifically, seems a fertile ground for PSM since, historically and linguistically, it possesses not only traits that are characteristic of (i) but also morphological inventory traits which are similar to the main PSM-related characteristic of (ii) (see §3.2). Israeli's historical circumstances also resemble those shared by minority languages (see Zuckermann 2000: 285-91), as well as by pidgins and creoles (ibid.: 320-3). I have analysed in §3 and §4 the typological characteristics predisposing a language to PSM, as well as of the various motivations across language typological categories.

As contemporary research shows (e.g. Zuckermann forthcoming), the concept of *hybridization*, or *hybridity*, is useful not only in lexicology, but also in the analysis of genetic classification of languages, as well as cultural studies. In fact, PSM reflects cultural and social interactions and often manifests the attempt of a culture to preserve its identity when confronted with an overpowering environment (e.g. American influence), without segregating itself from possible influences. In this new millennium, communications technology facilitates ever-increasing contact between languages and cultures. With the influence of satellite television and the Internet, the mobility of words is reaching an unprecedented level. The study of the dynamics of language contact can hardly be more timely.

Notes

[1] Russian очки *ochkí*, Polish *okulary* [okuˈlarɪ] 'glasses'.

[2] While compounds were favoured by the *Haskalah* writers (of the Enlightenment movement, 1770s-1880s), the 'revivers' of Hebrew – for ideological reasons – often attempted to replace them (see §5.3).

[3] Before revealing the Greek co-etymon, Hazan says: אך מדוע בחרתי בשרש שקף – בזה על נדקדק הרבה, כי הדקדוקים האלה יתנו רק מכשולים על דרכנו בבנותנו מלים חדשות. 'But why have I chosen the root שקפ √*ʃqp*? – Let us not be too pedantic, because a preoccupation with such minutiae will only obstruct our path to new words.'

[4] Jastrow (1903: 1625a) suggests that the ultimate etymon of Biblical Hebrew שקפ √*ʃqp* 'bend, arch, lean towards' is קפ √*qp* (hence a possible relation to Biblical Hebrew קפח √*qpḥ*, קפה √*qph*, קפא √*qp ʔ*, קפי √*qpj* 'arch, bend') fitted into the ***sh****a□□é□* verb-pattern. However, this verb-pattern is usually causative, cf. Hebrew שלכ √*ʃlk* 'cast off, throw down, cause to go' < לכ √*lk* 'go', as well as שטפ √*ʃṭp* 'wash, rinse, cause something to be wet' < טפ √*ṭp* 'wet'. Ancient Greek σκοπέω *skopéō* is traceable to PIE **skep-* 'look', a metathetical form of PIE **spek-*.

[5] I use the new coinage *Israeli* rather than *Modern Hebrew*. The genetic classification of *Israeli* – which is far beyond the scope of this article (see Zuckermann 1999, forthcoming) – has preoccupied linguists since the language emerged in *Eretz Yisrael* (Palestine) at the beginning of the twentieth century. The still prevalent, traditional view suggests that Israeli is Semitic: (Biblical/Mishnaic) Hebrew revived. The revisionist position defines Israeli as Indo-European: Yiddish relexified (cf. Horvath and Wexler 1997), i.e. Yiddish, the 'revivalists'' mother tongue, is the *substratum* whilst Hebrew is only a *superstratum*. My own *mosaic* (rather than *Mosaic*) hypothesis is that Israeli is simultaneously both Semitic and Indo-European; both Hebrew and Yiddish act as its *primary contributors* (rather than *substrata*). Therefore, the term *Israeli* is far more appropriate than *Israeli Hebrew*, let alone *Modern Hebrew* or *Hebrew* (*tout court*). It could be argued that the term *Israeli* is anachronistic because it equates the emergence of the language with the post-1948 nation state. However, this need not be the case. After all, Italian was also spoken before the Italian state came into existence.

[6] Other possibilities might have been מבטים **mabatáim*, from מבט *mabát* 'look (n)'; עגולים **iguláim*, from עגול *igúl* 'circle' (cf. the Israeli slangism עיגולדים *iguládim* 'glasses'); חלוניות **khaloniót*, from חלון *khalón* 'window'; זכוכיתים *zkhukhitáim*, from זכוכית *zkhukhít* 'glass' (זכוכיתים *zkhukhitáim* was actually used in Jerusalem prior to משקפים *mishkafáim*); פשפשים **pishpasháim*, from פשפש *pishpásh* 'wicket'; and עיניות *eyniót*, from עין *áin* 'eye' (cf. עינית *eynít* 'eye-piece, ocular' in Even-Shoshan 1997: 1318b).

[7] cf. the *Stammbaum* model, or the family tree, devised by comparative philologists in the nineteenth century to represent relationships between languages. For example, Sanskrit is a 'daughter' of Proto-Indo-European.

[8] In Ben-Yehuda (1909-59: vii:3418b) משקפת *mishkéfet* is defined as '*télescope*' but said to be used also as '*lorgnette*' ('spyglass').

[9] Here, as well as throughout this paper, *neologism* is used in its broader meaning, i.e. either an entirely new lexeme or a pre-existent word whose meaning has been altered, resulting in a new sememe.

[10] Basing the term on תצלול *tatslúl*, Rosen (1994: 86) uses חצלול *khatslúl*, an acronym for חקוי צלילים *khikúy tslilím* 'sound imitation' in order to refer to morphemic adaptation.

[11] Miller (1967: 253) claims that the co-etymon of *sebiro* is English *civil*, suggesting that in the early *Meiji Period* (1868-1912, cf. Nelson 1997: 1256b), Japanese civil servants and public officials had to wear Western clothing. However, note that the 'Western civil clothing' which Miller discusses was more likely to have looked like a collared military uniform, while 背広 *sebiro* refers to a fashionable, tailored blazer or jacket. Kindaichi et al. (1975: xxii:66) also mention the toponym *Cheviot* as a co-etymon. I assume that this refers to the Cheviot Hills in Scotland and northern England, which produce good quality wool. Note that under normal circumstances of phonetic adaptation, English *civil* should have been recalibrated as **shibiru*, in which the palatalization of /s/ is due to the [i] which follows it. This, however, does not necessarily rule out the possibility of *civil* because PSM, being lexical, can violate phonetic laws. Furthermore, following the *Congruence Principle* (Zuckermann 2003), more than one of the above sources could have contributed at the same time.

[12] The terms *pleremic* and *cenemic* are referred to by French (1976: 118), Haas (1976) and Coulmas (1989 *passim*, 1999: 71, 408). They are based on Hjelmslev's 1938 *plérématique* and *cénématique* (cf. Hjelmslev 1959: 152). For relevant discussions of Chinese orthography, see also Haas (1983), Norman (1988) and Frellesvig (1996).

[13] Israeli מבדוק *mivdók* 'dock, shipyard' alone usually refers to *dry/graving dock*, cf. the marked form מבדוק צף *mivdók tsaf* 'floating dock'. Compare מבדוק *mivdók* with Israeli מספן *mispán* 'dock', mentioned in *Lešonénu* 18 (3-4): 240b (1953). Another word fitted into the *mi□□ó□* noun-pattern is Israeli מצפור *mitspór* 'lookout (point) (with bird's eye view)', cf. (Hebrew>) Israeli צפור *tsipór* 'bird'.

[14] cf. Israeli מלטשה *miltashá* 'diamond-polishing workshop' and Israeli מספנה *mispaná* 'dockyard'. Israeli מבדקה *mivdaká* 'censor's office, testing laboratory' is not in common use.

[15] cf. Israeli מטבחים *mitbakháim* 'slaughterhouse'. I do not mention *mi□□á□* because Israeli מבדק *mivdák* most probably existed previously with the meaning 'check, test'; the lexicographic meaning 'test material' (cf. Even-Shoshan 1997: 840a) is uncommon.

[16] Note the Israeli minimal pair תקע *téka* 'plug' and שקע *shéka* 'socket', cf. the obsolete ColloqI שתקע *shtéka* 'plug or socket', phonetically similar to German *Stecker* 'plug' and Yiddish שטעקער 'id.'.

[17] Note, however, that in the verbal system, $\sigma_i\sigma_e$ – or *(□)(□)□i(□)(□)□é□(□) (a*.k.a. *piél*) – is currently the most productive verb-pattern in Israeli (cf. Wexler 1990: 85-6 and Bat-El 1994). The reason is the ease of inserting foreign consonants, which would thus constitute a camouflaged foreign influence on Israeli morphology. Bat-El (1994) introduces a novel approach according to which such verbs are based on the SL lexical item rather than on its naturalized root within Israeli. In other words, למגנט *lemagnét* 'to magnetize' does not derive from the root מגנט √*mgnṭ* fitted into the $\sigma_i\sigma_e$ verb-pattern, but rather from the internationalism *magnet* (cf. Israeli מגנט *magnét*) fitted into this specific verb-pattern in order to retain the foreign cluster. This view might weaken the Semiticness of Israeli morphology since the root system (which in this view does not play a role here) is one of the most fundamental elements of Hebrew and the other Semitic languages.

[18] cf. Arabic العمل التقنيّ [ʔalˈʕamalu ttiqaˈnijju] 'the technical work', pronounced thus in Nazareth.

[19] I have encountered native Arabic-speakers who, unaware of Arabic تقنيّ [ˈtaqni], when confronted with the internationalism *technical*, naturally transposed the latter into تكنيّ [ˈtakni] 'technical'.

[20] In the last example, one can also observe Greek τ (*t*) being transposed into the emphatic ط [ṭ] rather than into ت [t]. However – as in the case of a foreign *k*, which can be transposed either into ك [k] or into the emphatic/pharyngeal ق [q] – in modern times the non-emphatic ت [t], like ك [k], is preferred; see Arabic تيتانوس [ˈti:ta:nu:s] 'tetanus', from the internationalism *tetanus*.

[21] Alterman: נקבל אותם בהצדעה וסילוד *nekabél otám behatsdaá vesilúd* 'We shall welcome them with a salute and *silúd*'; Kna'ani (1960-89: 4049; 1998: 4031a) mentions סילוד הנשיא *silúd hanasí* 'the president's salute' as having appeared in newspapers.

[22] cf. *Zikhronot Va'ad HaLashon* 4 (1914: 42). A similar view by Mazia can be found in *Zikhronot Va'ad HaLashon* 6 (1928: 85).

[23] The internationalism *tourist* (cf. Israeli טוריסט *turíst*) is used as the 'nativizing material' in the case of the slangism טוריסט *turíst* 'digger, someone working with a large bladed hoe' (see Sappan 1971: 35a), a jocular adaptation of *tourist* to mean somone using a *turíya* – cf. Israeli טוריה *turíya* 'a large bladed hoe, mattock' (<Arabic طوريّة [ṭu:ˈrijja] 'id.').

[24] Note that today, in MSC, new country names are usually only phonetic matches, the characters chosen being without semantic resonance. Furthermore, in order to avoid misunderstanding, the characters are often ones that are not widely used.

[25] 国 *guó* is similar in sound to English *-ca* only coincidentally; it is a morpheme which appears in many country names whose original name does not end with *-ca*. Note that the original Chinese name for *America* was 美利坚合众国 MSC ***měi**lìjiān hézhòng**guó***, lit. 'America united people country' (i.e. 'United States of America').

[26] There are also Chinese examples of uses of toponymic PSMs to propagandize against hostile nations. For example, the *Turks* were called in Classical Chinese 突厥 (MSC *tūjué*), consisting of 突 *tū* 'attack, invade' and 厥 *jué* 'stone-launcher' (sixth-ninth centuries). *Mongol* was allied with Classical Chinese 蒙古 (MSC *ménggǔ*), consisting of 蒙 *méng* 'dark, obscure, abuse' and 古 *gǔ* 'old, locked, stubborn' (introduced around the eleventh century but still used). Compare these to Hawaiian *Pukikí* 'Portuguese', a xenophobic PSM which derives from **(i)** English *Portuguese* and **(ii)** Hawaiian *pukikí* 'strong, violent, impetuous' (Deroy 1956: 287). Note that Hawaiian [k] is *inter alia* the common replacement for English [t], [d], [s], [z], [ʃ], [t͡ʃ], [g] and [k].

[27] 'Whatever lives for a long time is gradually so saturated with reason, that its irrational origins become improbable. Does not almost every accurate history of the origin of something sound paradoxical and sacrilegious to our feelings?'

[28] In Israeli one might call *camouflage linguistics* בלשנות הסוואה *balshanút hasvaá* (הסוואה *hasvaá* meaning 'camouflage'), which could be juxtaposed with בלשנות השוואה *balshanút hash**h**vaá* 'comparative linguistics', lit.

'comparison linguistics', cf. the more common term בלשנות משווה *balshanút mashvá* 'comparative linguistics', lit. 'comparing linguistics'. Compare this with a *shibboleth*-like Israeli jocular definition of *blender*: התנועה ל**ס**חרור ה**עי**סה *hatnuá le**s**ikhrúr hai**s**á*, lit. 'the movement to beat dough, the dough mixing movement', modelled upon התנועה ל**ש**חרור ה**אי**שה *hatnuá le**sh**ikhrúr hai**sh**á* 'Women's Liberation Movement'.

[29] Note, however, the high frequency of penultimately-stressed *segolate* noun-patterns in neologization, e.g. by Shlonsky and Alterman – cf. Kna'ani (1989).

[30] On multiple (usually, dual) motivations for neologisms, see Kronfeld (1996), Chapter 4 ('Beyond Language Pangs'), particularly the section on Shlonsky (pp. 103-109).

[31] First steps towards such a refinement were introduced by Zuckermann (2000: 9-38). By 'traditional classifications of borrowing', I am referring to the previous research on borrowing, for example Betz (1945, 1949), Haugen (1950), Haugen (1956), Deroy (1956), Gusmani (1973) and Heath (1994), as well as Haugen (1953), Weinreich (1963, 1st edition: 1953), Carstensen (1968), Haugen (1973), Clyne (1967), Hock (1986, especially Section 14, pp. 380-425) and Myers-Scotton (1988).

[32] As opposed to internal sources of lexicon-enrichment such as intra-lingual blending, e.g. Israeli דחפור *dakhpór* 'bulldozer' – from (Rabbinic Hebrew>>) Israeli דחף √*dħp* 'push' and (Biblical Hebrew>>) Israeli חפר √*ħpr* 'dig' – which is an internal source of lexicon-enrichment and therefore outside the scope of Haugen's research.

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Author's address

Ghil 'ad Zuckermann
Churchill College
University of Cambridge
Cambridge, UK
www.zuckermann.org
gz208@cam.ac.uk