

conlanging in films

Britton Watkins

LCC6 — Horsham 2015

17 December, 2009

4:30 PM

E-mail in very broken Na'vi (but only in Na'vi) to Paul Frommer.

7:30 PM

Response from Paul (surprised that anyone was writing in Na'vi).

18 December, 2009

Avatar is released



19 December, 2009

A sketch of Na’vi is published by Paul on Language Log

Language Log

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Some highlights of Na’vi

December 19, 2009 @ 12:43 am · Filed by [Ben Zimmer](#) under [Language in the movies](#)

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James Cameron's sci-fi blockbuster *Avatar* is opening this weekend with much fanfare. As has been widely reported, Cameron enlisted a linguist, Paul Frommer of USC's Marshall School of Business, to create the Na’vi language, spoken by the inhabitants of the alien world Pandora. We first heard about the development of Na’vi nearly three years ago, when Cameron was hyping the as-yet-unnamed language of Pandora as one that would "out-Klingon Klingon." (See my post, "[Advances in cinematic xenolinguistics](#)," Jan. 29, 2007.) When I decided to write about Na’vi and other alien tongues of the silver screen for the *New York Times Magazine* On Language column, I finally got to learn the real story of the language's construction from Paul Frommer himself ("[Skxawng!](#)," *NYT*, Dec. 6, 2009).

Paul generously shared a great deal of material describing Na’vi's phonetics, phonology, morphology, and syntax, hardly any of which found a place in my On Language column. But since there is already tremendous interest in the language, and some less-than-accurate information about it is currently floating around online, I asked Paul if he could write up a formal description of Na’vi as a Language Log guest post. He wasn't able to reveal everything about the language, but what he has sketched out should whet the appetite of even the most diehard xenolinguistics buffs.

[Guest post by Paul Frommer]

Given the interest that's already been shown in Na’vi, I'm grateful to Ben Zimmer for the opportunity to post a few highlights of the language to Language Log. As will be apparent, the information below is not intended to be anything like a complete description; the Phonetics and Phonology section is the most complete, but the Morphology and Syntax sections are mere sketches. Given my contractual obligations, a more thorough treatment awaits another venue. But I hope this sketch will answer a few questions and perhaps serve to counterbalance some of the erroneous information that has made its way to the Internet. Needless to say, comments are welcome.

PHONETICS AND PHONOLOGY

Na’vi has 20 consonants, 7 vowels, 4 diphthongs, and 2 syllabic "pseudovowels," rr

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19 December, 2009

In the posting comments I meet
several people and find
learnnavi.org

William Annis

Wm Annis said,

December 19, 2009 @ 10:33 am

I was enjoying the way new sentences and phrases were coming out in different interviews with you. The collection reminded me of morphology exams from far too long ago.

Sebastian Wolff

Sebastian Wolff said,

December 20, 2009 @ 2:44 am

Kaltxi!

So, along the lines of "see a need, fill a need," I created a website where all Na'vi-learning can take place. Future plans include a translation interface, basic tutorials, and clear(er) conjugation tables (once the details of the grammar are more fleshed out).

The website is bare-bones, like the language thus far, but here it is:
<http://www.learnnavi.org/>

Arika Okrent

Arika Okrent said,

December 20, 2009 @ 12:12 pm

I do believe that comment by Prtton is the first documented transition of Na'vi from the fictional world into the real world. Anthropologists take note! A language community, 'tis born...

Blogging in Na'vi

about other films
& conlangish
topics

[🏠 Our Appeal](#) [About Na'vi](#) [Learn Na'vi](#) [Linguistic Help](#) [Contact](#) [Pìlok leNa'vi](#)

Ayohel ngengati kameie, ma Sempul

Peykawm teyngta pelun...
Pamrel June 16, 2012 fa **Prrton** Kea Säplltxevi – **Säplltxevit ngeyä sivung.**

Nìfkr̥r̥ seykuḷin oet rusikxa relìl alu Pìromiteusì nìtxan. Lì smon ngar, srak?

Sunu oer nìtam slä lu fya'or a vurit muwolintxu tìngäzik a'a'aw kop. Pxìm lun ke nāpong nìyo'. Tse, Uniltirantokx ke yatso' nìteng... Tsari txoa liveiu.

Fìvurìri, 'a'awa tute frrfen kifkeyti a 'Rrtari lìm fte rivun ayngopyut awngeyä alu hìyuman a Na'viri syaw fko sawtute. Fayngopyur syaw fko Entsyìnir. Ral filì'uä slu txulayu nì'nglisì.

Sop a ponguä hapxìtul a'a'aw spaw futa nìngay ayEntsyìnirìl txukxa ftawnemkr̥r̥ hìyumanit ngolop. Ulte mì rel tsun fko tsive'a futa tsakem fo si nìftue fa fwa veykirä ayrina'it fnetireyā feyā ka kifkeyo a'ewan nìwotx ilä fay. Ha, nìlun, key feyā sì pum awngeyä lu steng nìpxi. 'Opin lu keteng slä tìlam lu stum teng.



 **Tel aR.eS.eSifa**

NAVITERI.org

FAM ayLl'UYÄ leNA'VI
nìWRRPA Tyger.orgMl

AYLl'UÄ RAMUNONG

PÌLOK TIREAYÄ AEAN

[🏠 Our Appeal](#) [About Na'vi](#) [Learn Na'vi](#) [Linguistic Help](#)

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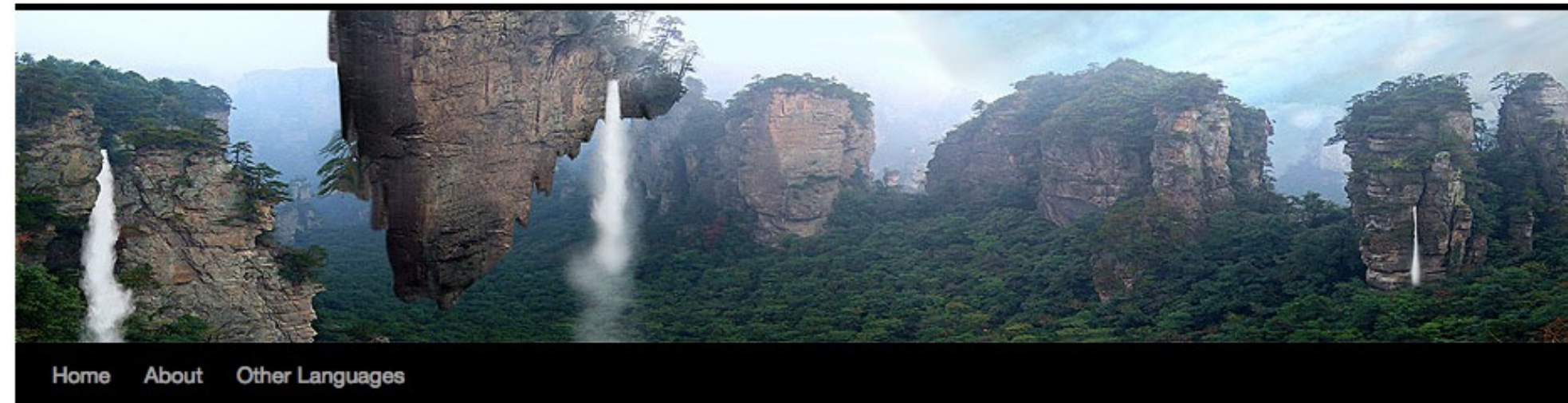
Nilaw, fìsäomumirì vingkatsap fkot teyngla pelun key Na'viyā sì pum awngeyä kop lu steng nìftxan? Txukxa ftawnemkr̥r̥ ayEntsyìnirìl folrrfen Eywa'evengit nìteng, srak?
Srake Na'vit 'eykolong nìteng?

June, 2010

I help Paul start his blog naviteri.org

Na'viteri.org

Ziva'u nìprte' fte nivume!



← A Na'vi alphabet

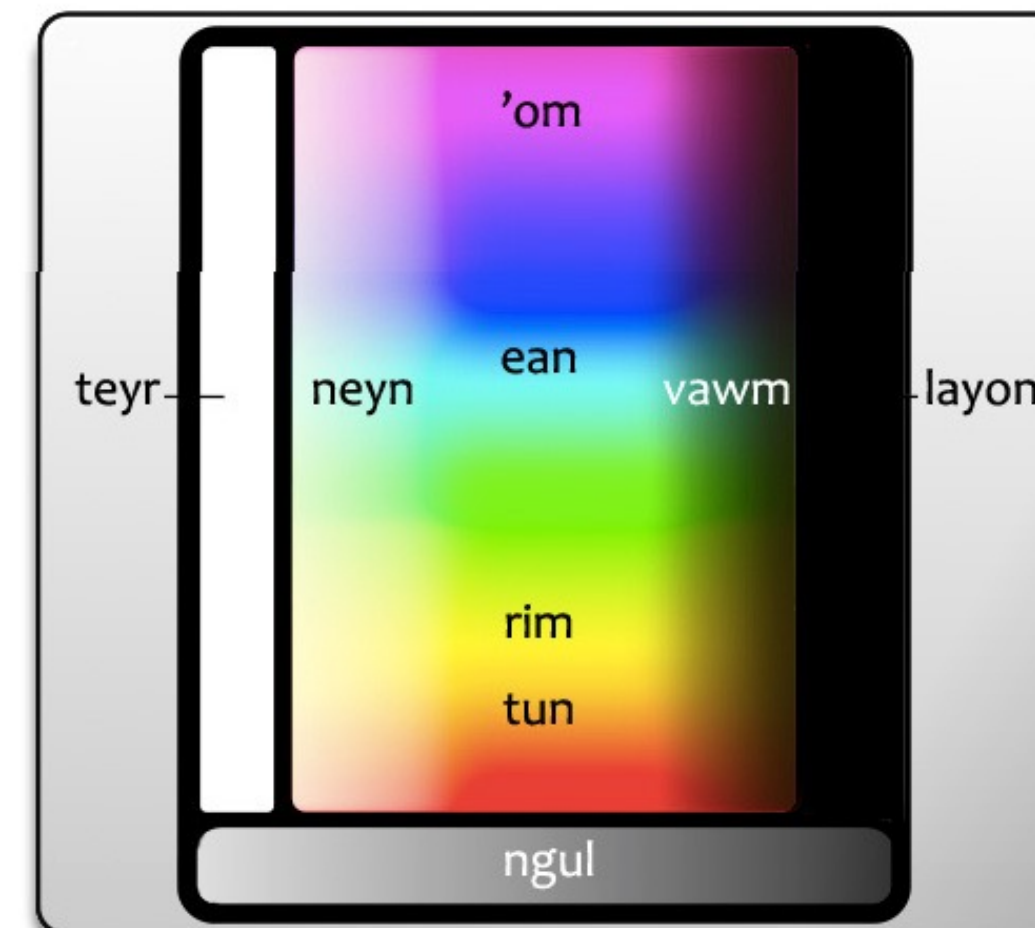
Kaltxi ta Kopenhan-Hi from Copenhagen →

Mipa ayopin, mipa ayli'u—New colors, new words

Posted on [August 26, 2010](#) by [Paul](#)

In honor of the re-release of *Uniltirantokx* tonight, here's Part 1 of the Na'vi color system along with a bit of new vocabulary.

Colors



As the graphic indicates, Na'vi has 9 basic or primitive color terms:

As the graphic indicates, Na'vi has 9 basic or primitive color terms:

TUN: covers the red-to-orange part of the spectrum

RIM: yellow

EAN: green to blue

'OM: violet to purple to magenta

LAYON: black

TEYR: white

VAWM: deep dark colors including browns

NEYN: light colors—"shades of white"

NCUL: gray or drab

further subdivide the spectrum and name colors more precisely. The Na'vi can also use these mechanisms:



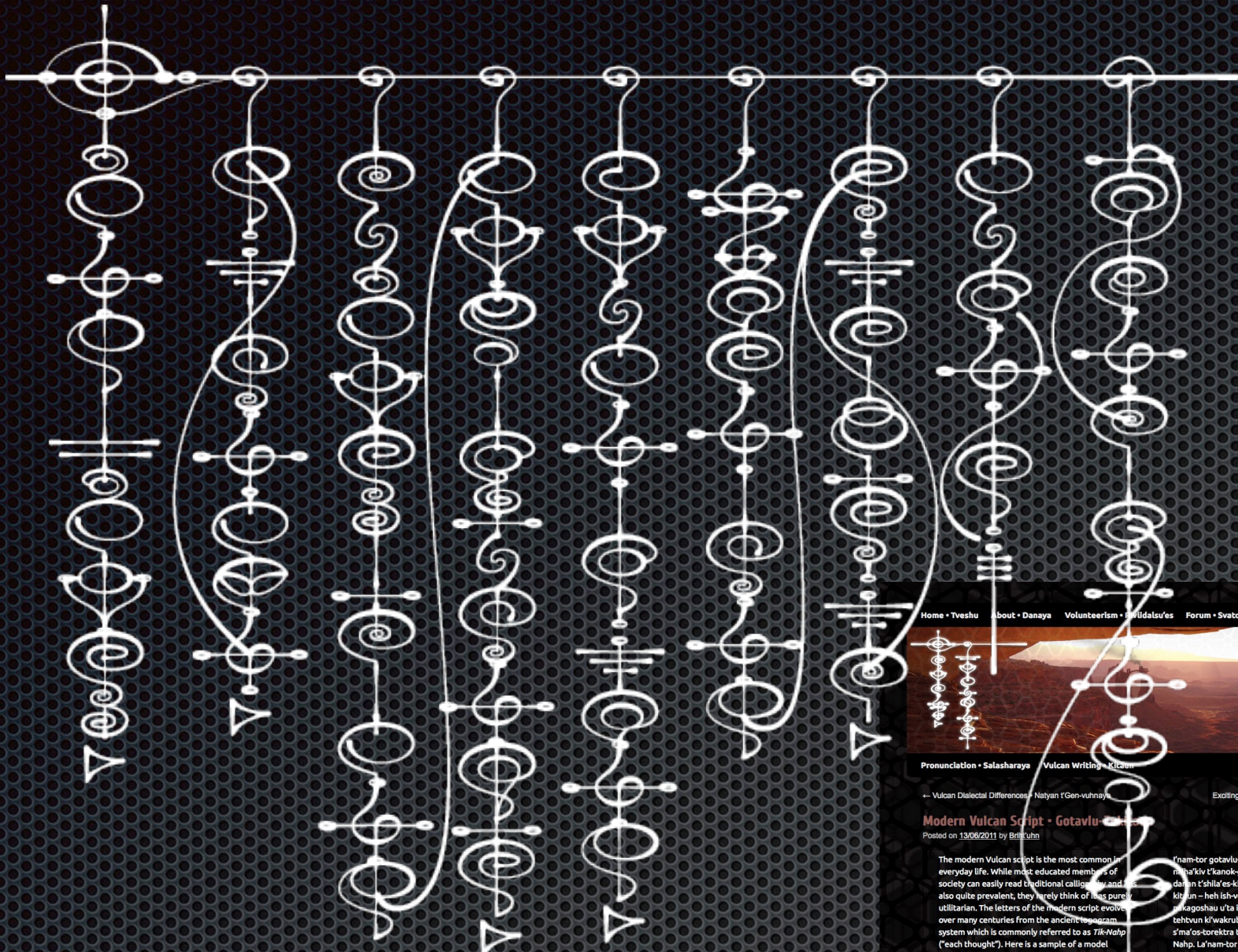
1ve°a Utxa a mì Na'ring

In October of 2010
the world's most
fervent Na'vi learners
come together *tokx*
eo tokx with Paul
at our place in CA.



Golic Vulcan

and new
ways to
write it



It is important to note that traditional calligraphy and the standard script do occur together in the same context quite frequently. Any information related to literature or poetry is more likely to show up in front of one's eyes in calligraphy. Browsing historical records or even reading for pleasure would likely produce the more ornate writing by default—while for non-verbal commands or other interactions with technology systems one would use the standard script. Vulcans deal easily with both systems simultaneously. When asked how it can be logical to juggle two very different kinds of writing instead of simplifying things into just one, Vulcans are very likely to query in return, "How could it be logical to ignore and forget the defining attributes of one's past for the sake of some present efficiency when none is required?"

Nam-to yauluhk beglanau n'ta ved k'ashiv
k'ka-ek'ta-klai paresh-to vanu-tanaf-kitaun
gotavlu-zukitaua terehuh. Nam-to veh-kesik
ta gluvau n'fan-ro'fori ik ma n'tersaya na'kitau-
tanaf ik zhitana'f bal'tanaf-kitaun. Kesting
sagluvau bi-yem t'vesh't-vidapan id ruhm telv
na'tizh weh-fanet-kitaun shating—v'yak
na'sviribaya ri-zhit-bosh id na'vath-svatoral
k'ek'mishan-torektra kesting is-to veh gotavlu-
kitaua. Ka-wak k'mohk kup-e'l'rekau Vuhlkansu
on t'lorektra. Ish-wak ik deshkau >Kup-nam-
to et'el'rukuvatu n'dah'r-torektra maui-
natyalik ozhikaik uf — Kesang maut-kesting
deshkau Vuhlkansu, >Kup-nam-to bau heh
yen t'mespar-romosh t'vesh't-visak'a t'veh
na'teral ik ein-veh-urgam'es t'la-wak of ruhm-
reh ya'bolau n'rim<.



Golic
Vulcan
and type it



February, 2012

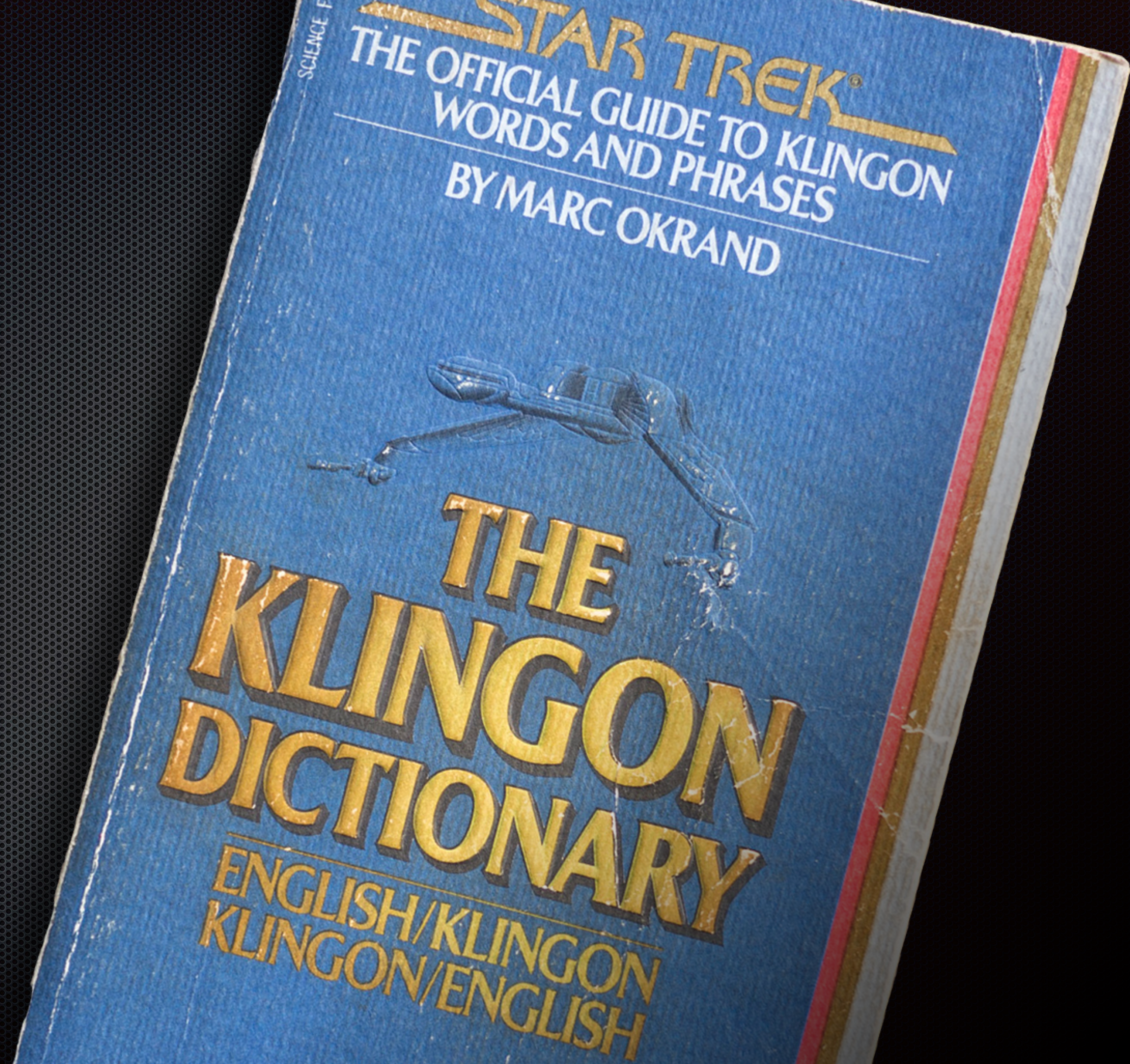
Project HH contacts Paul about *something* to do with Star Trek-related languages.

He refers them to me.

February, 2012

I find my original 1985
Klingon Dictionary and
recall that:

bortaS blr jablu'DI' reH
QaQqu' nay'



February, 2012

I become a “Language Consultant” for Project HH,
Star Trek Into Darkness



February, 2012

And do lots of things
that end up on the
cutting room floor.

C'est Hollywood !

wan'vam Dun luleghlaHmeH thIngan Suwv' Duyva' bong 'e' lunl tera'ngan
maghw'Daq SiqmeH naQ'ejw'j lo' Suwv'.

thoy yIHmey v'legh.

tugh qoH nachDaj je chevlu'ta'.

leghlaHchu'be'chugh min lo'laHbe' taj jej.

poH taj bl'reS nungbogh wa' jaj qey'

'ach nabmo' joH'a' yona ghup blQa'

burghDaq ghaHtaH yona.

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Specifics

The specific terms that are being considered for the uniforms by Michael and his team are the ones that you provided last week.

| | |
|----------|---------|
| patrol | nglv |
| squadron | nawlogh |
| section | wey |
| security | Hung |
| district | yoS |

They may or may not be combined with each other or with numerals in order to get the correct volume of text for the place on the costumes where they end up. Any comments you have on this or the possible combinations will be very much appreciated. My basic assumption is that for ordering nouns, the para-

graph's head-final and ordinal numbers follow. Which of these are preferred or how should they be corrected? Examples:

- 1) District 7 Security Section
yoS 7Dich Hungwey? (lit. Security Section of 7th District)
- 2) Security Patrol
Hung nglv or Hungng? (assuming that the geminate **ng+ng** does not merge)
- 3) Squadron 5 Section 8
nawlogh 5Dich wey 8Dich (or is a wey larger than a squadron? ») wey 5Dich nawlogh 8Dich?

Please keep in mind that what the insignias say is not critical to the story line *per se*. Decisions will be based primarily on "look" when rendered in the new stylistic variation of *plqaD* and spatial considerations related to the garments' designs. However, the end results should also be grammatical. Do these seem linguistically plausible to you? (NB: Bolding is flexible and can change depending on Michael's needs.)

Michael Kaplan's current aesthetic preference (X):

a **07x 7h 9c2 770**
District 7 Security Section

b **9c2 77h**
Security Patrol

c **9c2 77h**
Security Patrol

d **EE777 77h**
Squadron 5 Section 8

e **9c2 77h**
Security Patrol 8

f **9c2 77h**
Security Patrol

Alternate candidate typeface (Y):

g **07x 7h 9c2 770**
District 7 Security Section

h **9c2 77h**
Security Patrol

i **9c2 77h**
Security Patrol

j **EE777 77h**
Squadron 5 Section 8

517

vagh wa' Soch
(a uniform)

2

07x 7h 9c2 770
9c2 77h
EE777 77h

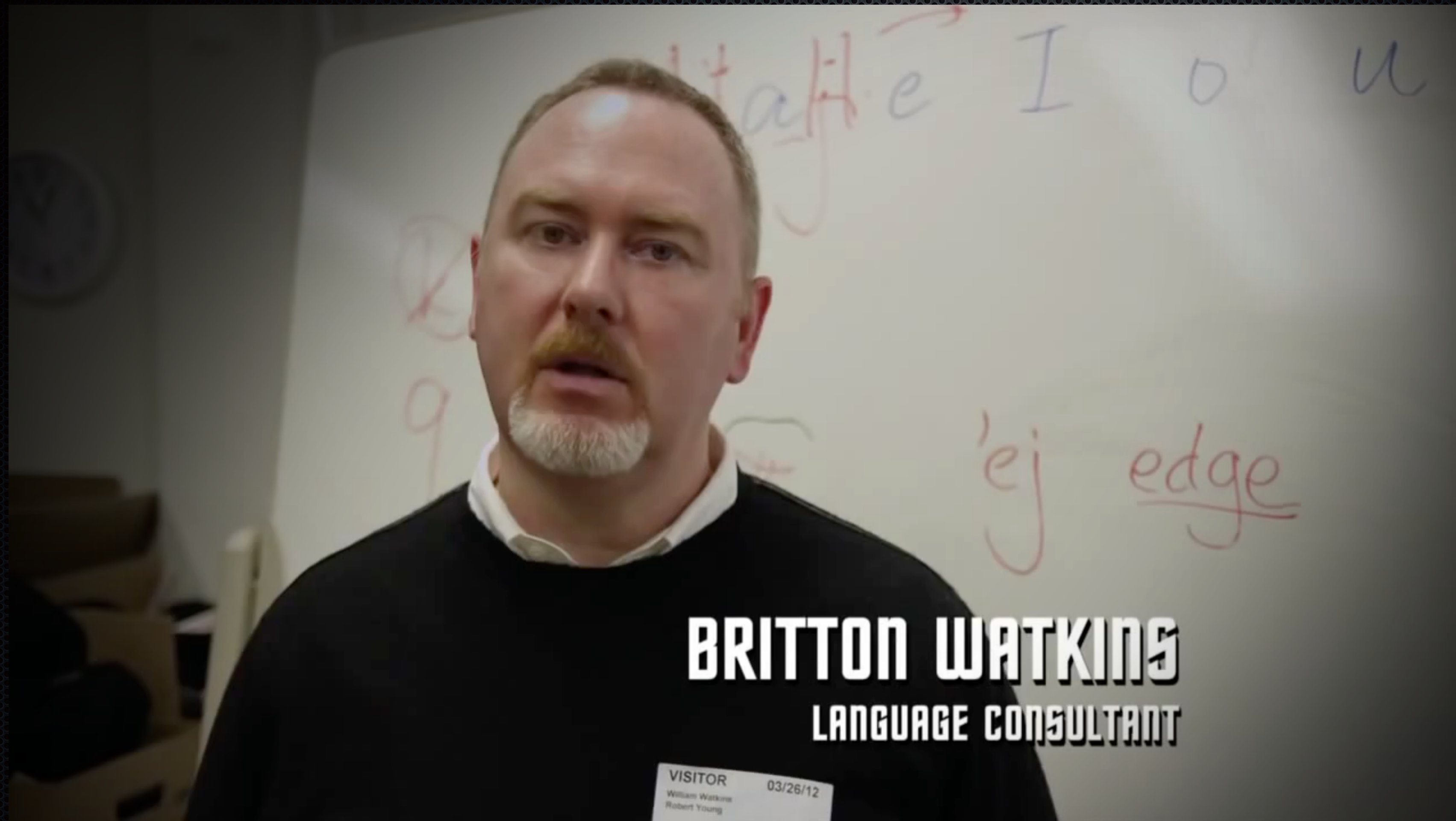
vs. "Y" — Legibility Advantages?

(fonts) that are installable on the various production designers' computers if my sending them blocks of text (blessed by you (Marc)) that they can use to recognize the individual glyphs or ever "pick them out of a hat" application. As of the writing of this document, Michael Kaplan has not yet "prototyped" a semibold example of **X** below. He has not yet attempted in an effort to visually step away from the pointed "traditional" forms closer to the originals than **X**—for visual recognition significantly more legible than **X** (or more desirable for any other reason) to evaluate **Y** vs. **X** for his design purposes.

Send to this document in writing at this time. I very much look forward to your comments on Monday in our conference call with Sean.

— Britton

07x 7h 9c2 770
9c2 77h
EE777 77h
07x 7h 9c2 770
9c2 77h
EE777 77h
07x 7h 9c2 770
9c2 77h
EE777 77h



<https://youtu.be/GnQ6gk8t4ic>

November, 2012

“I’m going to make a movie.”

—Josh



December, 2013
World Premier in San Francisco



Usnod' hlo pucchó'dde ge'ttyang bǎu pobrachá.



“She got cuffed yesterday an’ll get her brain washed today.”

<http://bit.ly/1Hu2AUS> to purchase bonus material (\$2.99 (USD))

November, 2014

Siinyamda is published
on Fiat Lingua

(<http://fiatlingua.org/2014/11/>)



questions?

britton@conlangingfilm.com