

Title: Proposal to Add to UAX #45 Three UTC-Source Ideographs for Units of Measurement

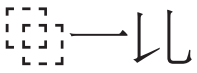


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This document is a proposal for adding three (3) new UTC-Source Ideographs to UAX #45 for inclusion in a future IRG Working Set.

The Ideographs

The table below shows the representative glyphs for the three proposed UTC-Source ideographs, along with their metadata:

Glyph	kRSUnicode	kTotalStrokes	kKangXi	IDS	Meaning
𠮟	1.2	3	0076.141	 一 𠮟	pound (unit of measurement)
𠮟	85.2	5	0604.091	 𠮟 𠮟	fluid dram
𠮟	85.3	6	0607.051	 𠮟 𠮟	fluid ounce

As the “Meaning” column indicates, these three ideographs represent units of measurement. In particular, the second and third ideographs, 𠮟 and 𠮟, are “fluid” versions of ideographs that are already encoded in the CJK Unified Ideographs Extension F block, U+2CF01 𠮟 and U+2CF04 𠮟, which represent *dram* and *ounce*, respectively.

The following three lines represent the three new records that would need to be appended to the *USourceData.txt* data file, which also specify tentative UTC-Source source references:

UTC-03225;N;;1.2;0076.141;𠮟一𠮟;UTCDoc L2/20-145 1;pound (unit of measurement)

UTC-03226;N;;85.2;0604.091;𠮟𠮟𠮟;UTCDoc L2/20-145 2;fluid dram

UTC-03227;N;;85.3;0607.051;𠮟𠮟𠮟;UTCDoc L2/20-145 3;fluid ounce

The *UTCHanAdditions2020-Regular.ttf* TrueType font, which is a PDF attachment, provides the representative glyphs that can be added to the *UTCHan.ttf* TrueType font.

Evidence

I would like to express my sincere thanks to @a4lg, @BabelStone, @mashabow, @mashcosan, William Nelson, @uakira2, @Umihotarus, and Alexander Zapryagaev for finding much of the evidence that is presented in this proposal, which helped to bolster it.

The evidence for these ideographs is presented in chronological order.

The ideograph 比 can be found on the left page of spread 11 in the publication entitled 遠西醫方名物考 (1822), which is available [online](#) and as a [downloadable PDF](#).

遠西醫方名物考 卷一 凡列

一錢ヲ三ニ分チタル其一ニメ即チ三分三釐三
 毛強ナリ○和蘭ニ是ヲ須屈爾百兒ト呼ブ。今權ニ
 呼日ヲ以テ符號トス。故ニ是ヲ略メ月ニ作ル
 弓八錢ナリ○和蘭ニ是ヲ穩斯ト呼ブ。今權ニ略メ
 今直ニ其符ヲ用フ
 比九十六錢ナリ○和蘭ニ是ヲ封度ト呼ブ。今權ニ
 呼ブト比ヲ以テ符號トス。故ニ略メ比ニ作ル
 右秤量ハ先輩嘗テ和蘭ノ一達刺屈末ヲ以テ我
 邦ノ一錢トスル說ニ準メ定ル所ナリ。然レ今西客
 通用ノ亞謨斯的爾達謨和蘭ノ藥秤ヲ以テ改メ較

The ideograph 北 can be found throughout the publication entitled 西洋度量考 (1855), which is available [online](#) and as a [downloadable PDF](#). The evidence provided here is of its first instance in this publication.

西洋度量考

一書中原曰ト云者ハ寫本ノ原本ヲ指^サス又遠西醫方
名物考及ビ同書ノ補遺ニ載ル者新制ノ度量ヲ云
一詳ナルハ之ヲ採用ス略ノ名考名補ト云テ引用
ス
一 衡量ノ封^{ボント、ラン}度穩^{ス、ダ}刺^ラ屈^ク末^マ須^ス屈^ク爾^ル百^ヘ兒^ル傑^レ列^イ乙^ン等[。]ハ
元來西洋ニ記^{アイ}號^シノ符^フ字^チアリ名物考ノ略字ニ從テ
コレヲ用フ即チ^北 ^{ボント} ^{フチヤウ} ^{オンス} ^ダ ^ラ ^ク ^マ
刀 スクルベル ^ゲ ^レ ^イ ^ン 等ナリ學者豫^{アラカシ}ノ諳記ス
ベシ

一 此書ノ原本和蘭ノ文字「アベセ」ノ順ニ從テ編次シ

All three ideographs can be found throughout the publication entitled 袖珍藥説 (1885), which is available [online](#). The evidence provided here is of their first instances in this publication.

藥局秤量ノ表

秤量		液量	
ポント	オンス	水オンス	トロム
ト	ドラム	トロム	ニム
ニ	スクリブル	グレイン	ガロン
北	九六	ハ	パイント
	二八	八	コング
	八五	八	パイント
	四六	一六	水オンス
	二四	一八	トロム
	四八	二四	ニム
	六	四六	四
刀	二	八	八
氏	六	四	八
		六	六
			六

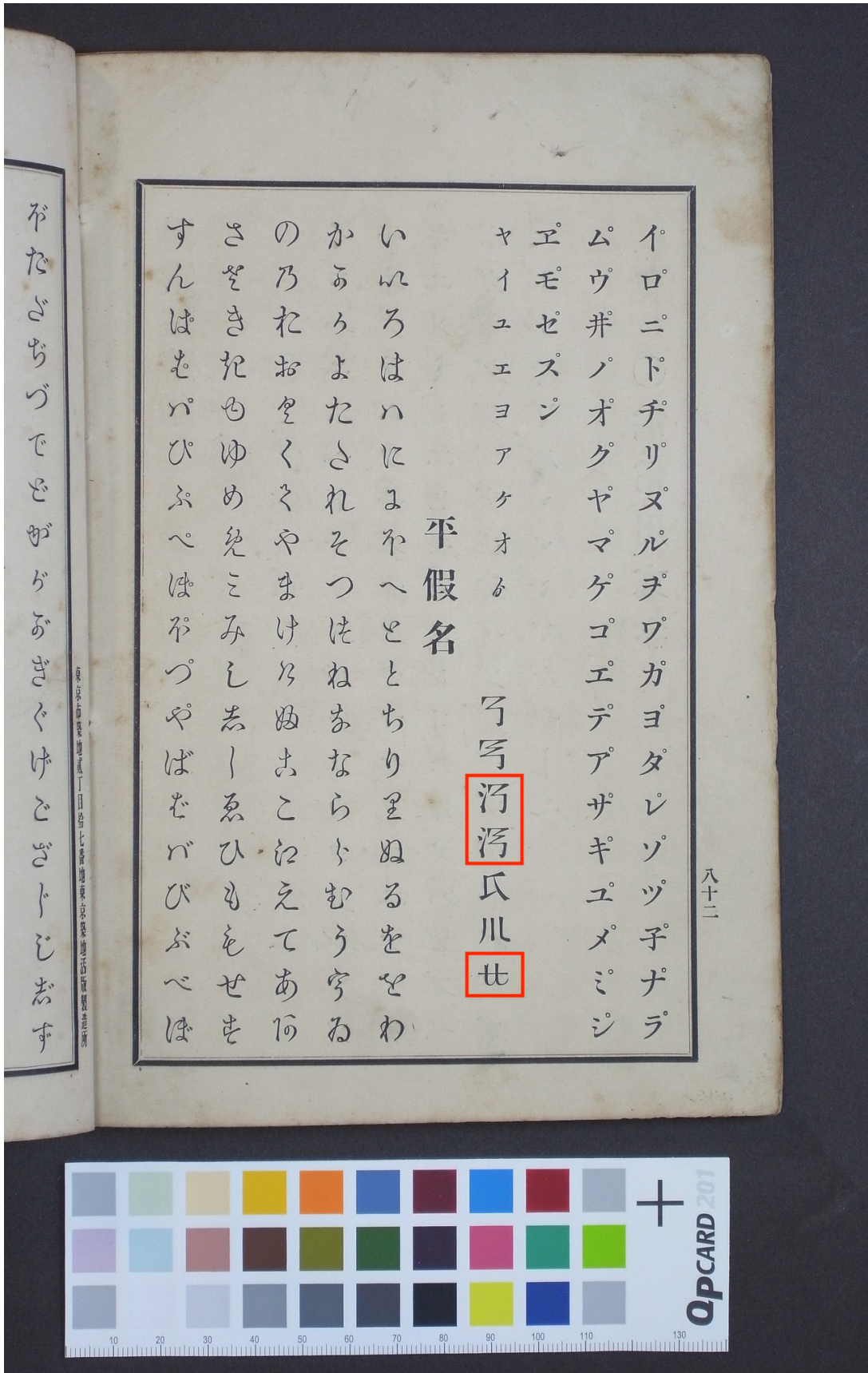
水一滴ハ凡一凡六十滴ハ一汚ニ齊シト雖モ悉ク他液ヲ以テ之ニ例ス可ラス譬ヘハ丁幾ノ一

由珍藥説 卷一 載余齋或反

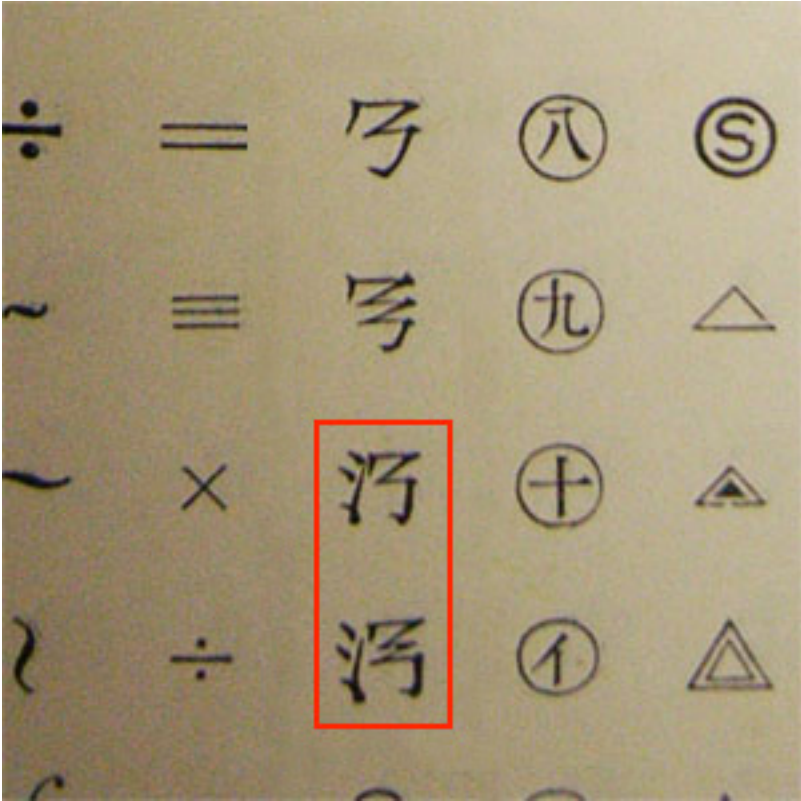
The ideograph 汚 can be found in the publication entitled 明朝体活字字形一覽 (1999), though the actual evidence is dated 1887.

	雨	震	霽	霽	霽	霽	革	鞞	鞞	頁	顛	風	颯	颯	馬	馮	馮
	鷲	鷲	鷲	鷲	鷲	鷲	鷲	鷲	鷲	門	閉	鬼	魘	魚	鯨	鯨	鯨
	鳴	鷓	鷓	鷓	鷓	鷓	鷓	鷓	鷓	補遺	口	另	少	中	禾	穀	
(5) 国文五号 1887年	义	人	亼	伏	仗	休	佃	伴	使	借	俾	偶	傅	郇	脩	暨	傷
	傳	價	*	免	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉
	衷	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉	𠃉
	隋	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙	嶙
	妬	妬	妬	妬	妬	妬	妬	妬	妬	妬	妬	妬	妬	妬	妬	妬	妬
	崙	崙	崙	崙	崙	崙	崙	崙	崙	崙	崙	崙	崙	崙	崙	崙	崙
	懶	懶	懶	懶	懶	懶	懶	懶	懶	懶	懶	懶	懶	懶	懶	懶	懶
	擗	擗	擗	擗	擗	擗	擗	擗	擗	擗	擗	擗	擗	擗	擗	擗	擗
	眈	眈	眈	眈	眈	眈	眈	眈	眈	眈	眈	眈	眈	眈	眈	眈	眈
	楚	楚	楚	楚	楚	楚	楚	楚	楚	楚	楚	楚	楚	楚	楚	楚	楚
	穢	穢	穢	穢	穢	穢	穢	穢	穢	穢	穢	穢	穢	穢	穢	穢	穢
	冰	冰	冰	冰	冰	冰	冰	冰	冰	冰	冰	冰	冰	冰	冰	冰	冰
	滙	滙	滙	滙	滙	滙	滙	滙	滙	滙	滙	滙	滙	滙	滙	滙	滙
	天	天	天	天	天	天	天	天	天	天	天	天	天	天	天	天	天
	疒	疒	疒	疒	疒	疒	疒	疒	疒	疒	疒	疒	疒	疒	疒	疒	疒
	睂	睂	睂	睂	睂	睂	睂	睂	睂	睂	睂	睂	睂	睂	睂	睂	睂
	矜	矜	矜	矜	矜	矜	矜	矜	矜	矜	矜	矜	矜	矜	矜	矜	矜
	簾	簾	簾	簾	簾	簾	簾	簾	簾	簾	簾	簾	簾	簾	簾	簾	簾
	緇	緇	緇	緇	緇	緇	緇	緇	緇	緇	緇	緇	緇	緇	緇	緇	緇
	耳	耳	耳	耳	耳	耳	耳	耳	耳	耳	耳	耳	耳	耳	耳	耳	耳
	齧	齧	齧	齧	齧	齧	齧	齧	齧	齧	齧	齧	齧	齧	齧	齧	齧

All three ideographs can be found on page 82 of the publication entitled 二号明朝活字書体見本 (1893), which is available [online](#).



The ideographs 汙 and 汚 can be found in the publication entitled 明朝五號活字摘要錄 (1913).



All three ideographs can be found on page 215 of the publication entitled *THE DICTIONARY OF "KAN-JI" OR JAPANESE CHARACTERS* (The Science Society, 1928) by P. M. Suski.

加州	“	“	California.
桑港	“	“	San Francisco.
羅府	“	“	Los Angeles.
紐育	“	“	New York.
華府	“	“	Washington.
倫敦	“	“	London.
巴里	“	“	Paris.
伯林	“	“	Berlin.
地中海	“	“	Mediterranean Sea.
大西洋	“	“	Atlantic Ocean.
太平洋	“	“	Pacific Ocean.
印度洋	“	“	Indian Ocean.
支那	“	“	China.
濠州	“	“	Australia.

Names of weights and measures of foreign countries are frequently expressed with single Japanese characters or with newly coined characters resembling the original in shape or sounds. The principal ones are shown below:

𪛗 = Grain	米 = Meter
𪛘 = Dram	粉 = Decimeter
𪛙 = Ounce	糲 = Centimeter
𪛚 = Pound	珊 = Centimeter
噸 = Ton	耗 = Millimeter
𪛛 = Fluidram	料 = Decameter
𪛜 = Fluidounce	糶 = Hectometer
片 = Penny or Pence	糶 = Kilometer
志 = Shilling	立 = Liter
磅 = Pound	竝 = Deciliter
吋 = Inch	壺 = Centiliter
呎 = Foot	耗 = Milliliter
碼 = Yard	計 = Decaliter
哩 = Mile	站 = Hectoliter
尋 = Fathom	站 = Kiloliter
浬 = Nautical Mile	瓦 = Gram
仙 = Cent	砵 = Decigram
弗 = Dollar	廳 = Centigram
法 = Franc	砵 = Decagram
馬 = Mark	廳 = Hectogram
留 = Ruble	庇 = Kilogram
兩 = Tael	

Similarity with U+23C74

The second ideograph in this proposal, 汙, is very similar to Extension B U+23C74 汙 whose code chart excerpt is shown below:

23C74 水 85.1	汙	汙	汙
	UCS2003	GHZ-31546.08	T6-2224

Per the evidence shown below for *KIRG_GSource* source reference GHZ-31546.08 that corresponds to the dictionary entitled 漢語大字典, 汙 and 汙 are not cognate, and therefore cannot be unified. U+23C74 汙 is cognate with U+6C59 汙, U+6C5A 汙, and U+6C61 汙, all of which carry the meanings *filthy*, *dirty*, *impure*, and *polluted*:

A photograph of a page from the '漢語大字典' (Great Chinese Dictionary) showing the character '汙' and its definition. The text reads: '汙 同“污”。《龍龕手鑑·水部》：“汙，《新藏》作污。”'

That is all.