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# Tiao-Fish through Chinese Dictionaries

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#### TIAO-FISH THROUGH CHINESE DICTIONARIES

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The tiáo < d'ieu < \*d'iôg fish, a classical Chinese happiness metaphor, has been contradictorily identified as a chub, culter, dace, eel, goby, hairtail, hemiculter, loach, mullet, paddlefish, and pike. This paper illustrates the history of Chinese lexicography by comparing tiáo definitions from thirty-five Chinese monolingual dictionaries with tiáo translation equivalents from sixteen Japanese and seventeen Western language bilingual ones.<sup>1</sup>

#### INTRODUCTION

I believe with all my heart that we'll live together one day as happily as two lobsters in a saucepan, two bugs on a muscle, one smile, though never to vanish, on the Cheshire face. (Dylan Thomas)

The present monograph on Chinese dictionaries started as a translation study of Zhuangzi's epistemological dialogue about whether humans can know the "happiness of fish" (see \$1.2). English translators have rendered the Chinese joyful  $ti\acute{a}o < *d'i\^{o}g$  B as "minnow," "thryssas" (i.e., anchovy), "herring," "trout," "silver carp," "small fish," "white fish," and simply "fish." Checking monolingual and bilingual dictionaries revealed even further disagreements about the  $ti\acute{a}o$ 's identity, and it became apparent that this fish provides a good case study of problems in Chinese linguistics and lexicography.

The first section reviews the lexicology of  $ti\acute{a}o < d'ieu < *d'i\^{o}g$  names and their classical Chinese association with happiness as recorded in the Shijing, Zhuangzi, Xunzi, Huainanzi, Shanhaijing, and Shuoyuan. Linguistics of the \*d'i\^{o}g name was complicated by seven alternative logographs and variant Old Chinese pronunciations of \* $d'i\^{o}g$ , \* $di\^{o}g$ , \* $di\^{o}g$ , \* $si\^{o}g$ , or \* $dzi\^{o}g$ .

<sup>1.</sup> Thanks go to Paul Benedict, Lothar von Falkenhausen, Hisanori Kimira, Victor Mair, Axel Schuessler, Isao Shimomura, and Paul Yang for commenting upon earlier versions of this paper.

The second compares the lexicography of Chinese tiáo entries in monolingual and bilingual dictionaries. Early Chinese-Chinese definitions (table 1) give descriptions, synonyms, and folk etymologies. Many modern monolingual Chinese dictionaries (table 2) repeat these earlier definitions and some identify tiáo as "Zucco platypus," but this is a lexical ghost misspelling for 'pale chub, Zacco platypus'. Most Chinese-Japanese dictionaries (table 3) translate tiáo as hae ~ haya 'dace; chub'. European language dictionaries (table 4) typically gloss tiáo as "a small white fish" or "a long narrow fish," but some copied the "Zucco" or an erroneous 'hairtail, Trichiurus armatus' identification.

Section three answers the "What fish?" and "Why happiness?" questions, and draws some general conclusions from tiáo to Chinese lexicography. Is it preferable to translate the tiáo as "a long, silvery fish," "a minnow" or "Zacco platypus"? In defining names of plants and animals, scientific nomenclature has the advantage of a metalanguage beyond descriptions and synonyms, but it has the disadvantage of unfamiliarity to most dictionary users. The Zucco mistake for Zacco is not anomalous, it is one of many misspellings that originated in the classic 1938 Cihai 解海 [A Sea of Words] and that have been copied in Oriental and Occidental Chinese dictionaries up to the present day.

The following has been written for a general audience interested in Chinese dictionaries and assumes no knowledge of either Chinese language or ichthyology. Chinese characters are referred to as logographs; with pictograph and ideograph literally used for depictions of things (e.g., 魚 originally portrayed a yú 'fish') and ideas (writing xiān 'fresh' as 鮮 with 魚 'fish' and 羊 'sheep' — i.e., when fish and mutton should be eaten). The vast majority of Chinese logographs are "phonetic compounds" consisting of two elements, a radical (a.k.a. signific or classifier) that gives a clue to the word's semantic field and a phonetic that roughly suggests its pronunciation. For instance, lǐ 鯉 'carp, Cyprinus carpio' (fig. 5) is transcribed with the 魚 "fish radical" and a lǐ 里 'village; countryside' phonetic, denoting a "lifish," not a "village-fish." Chinese fish names are typically either monosyllabic words written with this 魚 "fish radical" or polysyllabic -yú 魚

<sup>2.</sup> In a few fish logographs like tiáo written with a "branch" phonetic, the phonetic element has semantic significance. Xu (1990:396-7) gives the example of fáng 前 'Megalobrama terminalis' (fig. 14) which is said (e.g., Bencao gangmu, Read 1939:41) to be fáng 方 'square' shaped. In comparison with the English "triangular bream" name for M. terminalis, "square" and "triangular" mean 'angular'.

"-fish" suffixations. The 'needlefish, Japanese halfbeak, *Hyporhamphus sajori*' (fig. 11) has both types: *zhēnyú* 厳魚 "needle fish" and *zhēn* X (魚 "fish radical" & *zhēn* 箴 'needle' phonetic).

Besides usual abbreviations and symbols (e.g., §), note the following:  $\sim$  = alternative pronunciations, spellings, or graphs, " " = quote or literal meaning, and '' = semantic meaning. Greek letters (e.g., A for無疑) listed in the appendix represent special logographs not available in the JIS (Japan Industrial Standard) computer font. Modern Standard Chinese ("Mandarin") is romanized in the Pinyin system, and Modern Standard Japanese in the modified Hepburn system. Old and Middle Chinese — representing pronunciations circa 7th cent. B.C.E. and C.E. 7th cent. — are given in Karlgren's (1957 "Archaic" and "Ancient") reconstructions, changing his ng velar nasal to  $\eta$ , iglottal stop to ?, and a to a. Since the Old Chinese pronunciation of this tiáo fish was glossed \*d'iôg, \*d'jog, \*d'jôg, \*â'jôg, \*siôg, etc., it is tentatively called "\*DZIOG," with admission that this etymon is subject to revision. Texts are translated with current pronunciations; for instance, in table 1 dictionaries, the  $A \sim B$  fish is transliterated as tiáo in Modern texts (e.g., the 1716 Kangxi zidian), tiáo < d'ieu in Middle Chinese era ones (1067 Jiyun), and tiáo < d'ieu < \*d'iôg in Old ones (100 Shuowen jiezi).

Identifying Chinese fish names is problematic in foreign languages. Whenever possible, identifications are made with both English name(s) and ichthyological nomenclature(s). Figures 1-30 (alphabetically ordered by genus) illustrate the various fish said to be, or resemble, tiáo. While contemporary zoological dictionaries (e.g., Zhengzhong dongwuxue cidian, La-Han jizhui dongwu mingcheng, Shijie yurui mingdian) give reliable definitions of modern Chinese fish names, it is harder to identify classical ones. Read's (1939) study of the "Fish Chapter" in the classic (1596) pharmacopoeia, Bencao gangmu 本草網目 [Outline of Roots and Herbs], remains one of the best references, although it uses some dated terminology. The Bencao gangmu, edited by Li Shizhen (1518-1593), is what Unschuld (1986:145) calls "the best-known and most respected description of traditional Chinese pharmaceutics." This introductory section can aptly finish with the Bencao gangmu's tiáoyú A 魚 entry.

Interpretation of Names. Li [Shizhen] states that the name comes from 條 [ $ti\acute{a}O$  'branch'] meaning a narrow strip. The name [三魚  $c\acute{a}n$ /u] comes from 粲 [ $c\acute{a}n$  'bright; food'] meaning sparkling. The name [ $\Theta$ 魚  $qi\acute{u}$ /u comes from  $\square$  [ $qi\acute{u}$ ] a prisoner. The narrowness refers to the shape, the sparkle refers to its colour, and the imprisonment refers to its character.<sup>3</sup>

<sup>3.</sup> Read (1939:51) notes "This is hard to explain. The character W means to float. The explanatory note refers to its love of floating or swimming on the surface."

Explanatory Notes. Li [Shizhen] states that the hemiculter is a small fish found in the rivers and lakes, only a few inches long, thin and flat, shaped like a willow leaf. The scales are fine, regular and clear-cut of very attractive appearance (pretty). It likes to float around in shoals. [Xunzi] states that the hemiculter likes to float in the sunlight. It is best when salted in slices.

Qualities. Sweet, warming and nonpoisonous.

Uses. Li [Shizhen], boiled and eaten it dispels sorrow [cf. §1.5], is warming to the stomach, a cure for cold diarrhoea. (tr. Read 1939:51-2)

These pseudo-etymologies based upon phonetic elements such as  $\square$  "prisoner" came from classical dictionaries (e.g., Piya in table 1), and several modern ones (1965 Cihai in table 2) repeat Li's description. Before analyzing the dictionary definitions of tiáo  $\langle *DZIOG \rangle$  in section 2, it is first necessary to introduce the classics that definitions quote.

#### 1 LEXICOLOGY OF TIAO

Loci classici for the \*DZIOG A ~ B ~  $\Gamma$  fish are chronologically presented from the (10th?-6th cents. B.C.E.) Shijing §1.1, the (2nd cent. B.C.E.) Zhuangzi §1.2 and Xunzi §1.3, the (140 B.C.E.) Huainanzi §1.4, the (3rd?-1st? cents. B.C.E.) Shanhaijing §1.5, and the (20 B.C.E.) Shuoyuan §1.6. For each \*DZIOG occurrence, the original Chinese context and relevant commentaries are translated.

#### 1.1 Shijing's A

A short sacrificial hymn in the Shijing 詩經 [Book of Poetry/Odes] is the terminus a quo for \*DZIOG-fish, written tiáo < d'ieu < \*d'iog A:

Oh, the [Qi] and the [Zhu], In their warrens have many fish, Sturgeons and shout-fish, [A  $\alpha$  7] Long-fish, yellow-jaws, mud-fish and carp, For us to offer, to present, And gain great blessings. (281, tr. Waley 1937:231)

<sup>4.</sup> For example, the *Brya*, the oldest Chinese dictionary in §2.1, probably glosses the *Shijing* in §1.1. Coblin analyzed the first part of the *Brya* and found a distinct core of *Shijing* glosses, proposing (1972:508) that: "lexicography in China arose through the compilation and reworking of material from commentaries on specific texts, to form new compendia which were no longer associated with any particular text or texts."

<sup>5.</sup> For texts that have been translated into English, citations are from best available sources; otherwise, the passage is translated by the Author. Note that for the sake of simplicity, the Chinese measure words  $\vec{Cn} = \vec{C} = \vec{C}$ 

Waley is the only Shijing translator who avoids awkwardly transliterating tiáo by neologizing "Long-fish" based upon descriptions (cf. table 1).6 His "Sturgeons and snout-fish" are  $zh\bar{a}n < tjan < *tjan \Omega$  'Chinese sturgeon, Acipenser sinensis' and the smaller wěi < jwi: < \*giweg 顫 'beaked sturgeon, paddlefish, Psephurus gladius' (figs. 1 and 20). The "yellow-jaws, mud-fish and carp" with \*d'iôg (v. Piya in table 1) are: cháng < źian < \*dian  $\alpha$  'yellow croaker, cut-tailed bullhead, Pseudobagrus aurantiacus', yǎn < 'jan: < \*'jan  $\eta$  'sheat-fish, Silurus asotus', and lǐ < lji < \*ljeg ຍ 'carp, Cyprinus carpio' (figs. 21, 24, and 5).

The Shijing commentary of Zheng Xuan (127-200) glosses \* $d'i\hat{o}g$  as the " $\dot{\Box}$  A white \* $d'i\hat{o}g$ ." This ode implies that the Chinese anciently valued \*DZIOG A and these other five fish as being suitable for ancestral sacrifice (Hsu and Linduff 1988:357). Associations with happiness were not recorded until several centuries later.

# 1.2 Zhuangzi's B魚 and Δ

Two consecutive (ca. 2nd cent. B.C.E.) "Outer Chapters" in the Daoist Zhuangzi 莊子 [Master Zhuang] mention \*DZIOG-fish: \*d'iôgnjo B魚 is the subject of a dialogue about knowing the happiness of fishes, and \*d'iôg  $\Delta$  is said to be the proper food for an unhappy bird. Both contexts describe \*DZIOG with the word yóu < ipu < \*d'iôg 遊 'swim, float, drift; stroll, wander, ramble; diversion, leisure' — which had a special Daoist sense of "wandering" (Crandell 1983:114-5), translated as "strolling," "swim," and "play" below.7 Fish often have allegorical importance in Zhuangzi (viz. the opening story), and Allinson (1989:42) believes "A fish symbolizes a creature that can be caught."

<sup>6.</sup> Jennings loosely translates this line as "Salmon and smelt, and carp, and all," admitting they are "Approximate names." Couvreur and Legge note commentaries describing the  $*d'i\partial g$  A as a "long and narrow fish," and the latter cites Williams (cf. table 4) that it "may be a species of thryssa or engraulis," i.e., anchovy.

<sup>7.</sup> This  $\frac{1}{2}$  logograph with the "motion radical" on the left was originally written  $\frac{1}{2}$  with the "water radical" specifying 'swim, float'. The \*d' $\hat{p}$ 0g' 'pendants on a flowing banner' phonetic element on the right of  $\frac{1}{2}$ 0 originally pictured a  $\frac{1}{2}$ 1 'child' under a banner or flag, with \*d' $\hat{p}$ 0g sharing cognate senses of 'floater; floating'. The second context adds the (rhyming) word  $\hat{p}$ 10u < \*b' $\hat{p}$ 2u < \*b' $\hat{p}$ 3u 'float; swim'. There is an obvious parallel between a fish in the water and a sage in the Dao. The *Zhuangzi* (6/73, tr. Graham 1981:90) says, "Fish forget all about each other in the Yangtse and the Lakes, men forget all about each other in the lore of the Way."

The best known (e.g., Yukawa 1983, Lee 1986) \*DZIOG usage occurs in a conversation set between Zhuangzi ("Master Zhuang," Zhuang Zhou, 399-295 B.C.E.?) and Huizi ("Master Hui," Hui Shi, 380-305 B.C.E.?), who was a leader of the philosophical Mingjia 名家 "School of Names" (usually tr. Dialecticians or Logicians). Hui's frequent Zhuangzi textual role is to serve as a friendly foil; making it easy for Zhuangzi, Mair (1983:90) explains, "to go on his romp against ratiocination." This "happiness of fishes" argument illustrates Daoist epistemological views on the inherent subjectivity of "knowledge" (Carr 1988:69-71) and syntactically hinges upon a cognitive/locative pun with ānzhī安知 'how/what/where do you know' (cleverly tr. by Graham as "Whence do you know?").

[Zhuangzi] and [Hui Shi] were [\*d'元智語] strolling on the bridge above the Hao River.

'[B魚出游從容] Out swim the minnows, 8 so free and easy, 'said [Zhuangzi]. 'That's how fish are happy.'

'You are not a fish. [安知魚樂] Whence do you know that the fish are happy?'

'You aren't me, whence do you know that I don't know the fish are happy?'

'We'll grant that not being you I don't know about you. You'll grant that you are not a fish, and that completes the case that you don't know the fish are happy.'

'Let's go back to where we started. When you said "Whence do you know that the fish are happy?", you asked me the question already knowing that I knew. I knew it from up above the Hao.' (17/87-92, tr. Graham 1981:123)

Guo Xiang (265-317) glosses B pronunciations of tiáo < d'ieu < \*d'iog, chóu < d'ieu < \*d'iog, yóu < ieu < \*diog, or xiǎo < sieu: < \*siog, and identifies it as a/the báiyú < b'aknwio < \*b'ǎknjo 白魚 "white fish." With ambiguity similar to English whitefish meaning either generally 'fish with white meat' (cod, sole, halibut, bluefish) or specifically the 'Coregonus' genus, Chinese báiyú 白魚 "white fish" (cf. §1.6) can mean 'whitefish' or specifically the 'culter, Culter alburnus' (fig. 4, and later 'glassfish, icefish, Salangichthys microdon', fig. 22).

The second Zhuangzi usage, in the "Perfect Happiness" chapter, describes birds "happily" eating \*d'iôg  $\Delta$  and  $qi\bar{u} < ts'igu < *ts'jôg <math>\dot{m}$  '(mud-)loach, Oriental weatherfish, Misgurnus anguillicaudatus' (fig. 15). Confucius supposedly tells this allegory when worried over his favorite disciple Yan Huitaking an official position:

<sup>8.</sup> Cf. these other translations: "minnows" (Balfour, Giles, Waley, Watson), "thryssas" (Legge, cf. § 1.1), "herring" (Ware), "silver carp" (Situ and Tang), "trout" (Fang), "small fish" (Lin), "white fish" (Chan), or simply "fishes" (Merton).

<sup>9.</sup> This  $*d'\hat{log}ts'\hat{log} \boxtimes \Delta$  is a rhyming compound; perhaps one \*DZIOG nomen. Note that Erya 16/8 (table 1) defines  $\Theta$  and 16/9 defines  $\boxtimes$ .

Once a seabird came down in the suburbs of Lu. The Marquis of Lu welcomed and banqueted it in the shrine of his ancestors, performed the music of the Nine Shao to entertain it, provided the meats of the [Tailao] sacrifice as delicacies for it. Then the bird stared with dazed eyes and worried and pined, did not dare to eat one slice, did not dare to drink one cup, and within three days it died. This was caring for a bird with the cares proper to oneself, not to a bird. Someone who cared for it with the cares proper to a bird would let it perch in the deep woods, [] play on the shoals, [] float in the Yangtse and the Lakes, eat [] loaches and minnows, come down with the column as it flies in formation to veer with the line of least resistance and settle. ... A fish by staying in the water lives, a man by staying in the water dies; that they necessarily differ from each other is because their needs are inherently different. 10 (18/33-39, tr. Graham 1981:189-190)

Guo's commentary does not identify  $\Delta$  but lists the same  $ti\acute{a}o < d'ieu < *d'i\^og$  and  $y\acute{o}u < i\rlap{g}u < *d\rlap{i}\^og$  glosses as for the B魚, plus slightly different  $y\=ou < i\rlap{g}u < *d\rlap{i}\^og$  and  $t\acute{o}u < d'i\rlap{g}u < *d'i\^og$ . Without an identification, it seems he viewed  $\Delta$  as a variant of the preceding "white fish" B.

#### 1.3 Xunzi's BN

The Xunzi 荀子 [Master Xun] is a collection of essays attributed to Xun Kuang (298-238 B.C.E.?) and his followers in the "Naturalistic" school of Confucianism. One (ca. 2nd-1st cent. B.C.E.) passage<sup>11</sup> metaphorically refers to the \*d'iôgkjog? BN fish in describing ego delusions.

The mullet [ ] dart about near the surface of the water, but when they are netted and lying on the sand, though they may long for water, they will never reach it again. Similarly, when a man is caught in the midst of calamity, though he may wish he had been cautious, his wishing will be in vain. Those who know themselves do not resent others; those who know fate do not resent Heaven. Those who resent others are bound to fail; those who resent Heaven do not learn from experience. Erring oneself but attributing it to others— is this not far wide of the mark indeed! (4/20-22, tr. Knoblock 1988:188)

<sup>10.</sup> Compare other translations: "mudfish and minnows" (Watson), "mudfish or dace" (Ware), "eels and minnows" (Balfour), "eels and small fish" (Legge), "eels and fish" (Merton), and "fish" (Giles, Fung). A Huainanzi (9/22b, tr. Ames 1983:208) passage about repairing dikes says: "A fish swimming about in the water is happy, but if the dam is broken and the water drains off, the fish becomes food for insects." The idiom hé zhé zhī fu 本地文的 "carp in a dry rut" 'a person in a desperate situation (esp. one who needs immediate help)' comes from Zhuangzi (26/7).

<sup>11.</sup> Since this BN passage (4/20-22) is located within the Xunzi RF "Honor and Shame" chapter (4), there is reason to suspect it was added to the text (ca. 2nd or 1st cent. B.C.E.). Most Xunzi chapter titles begin with their first words, but because "Honor and Shame" occurs in 4/22 (immediately after the \*DZIOG parable), commentators interpret the section as a dubious accretion (Dubs 1928:5). Knoblock (1988:242, 245) concludes this 4/1-22 fragment may have originally been part of chapter 3.

The commentary of Yang Jing (fl. 814-840) says some people behave like this fish and notes fúyáng < b'jeujan < \*b'jôgdjan 浮陽 "play in the sunshine" has the same meaning as the Zhuangzi's "swim free and easy" \$1.2 with yóu < jeu < \*djôg 游 'swim; wander; travel' and cōngróng < ts'jwonjwon < \*ts'jundjun 從容'leisurely, calm'. (Cf. cōngróng búpò 從容不迫 'calm and unhurried'.)

Xunzi mentions \*DZIOG in a word-puzzle \*d'iôgkiog? BN with the hapax legomenon N (魚 "fish radical" & ben < puen: < \*pwen 本 'root' phonetic). Since N is not found in any other text - excluding dictionaries circularly glossing back to this passage - Qing dynasty (1644-1911) philologists came up with four explanations that the \*pwen 本 phonetic on the right of N was a graphic mistake for 丕, 豊, 喬 or 本.12 They interpreted N's \*pwen 本 phonetic as a miscopy of:  $\Lambda$  in  $pi \sim pi < b'ji < *b'jer <math>\iota$  'a large catfish'13 (Wang Niansun, 1744-1832), 豊 in lǐ < liei: < \*ljer 體 'snakefish, snakehead (mullet), Channa/Ophicephalus argus'14 (fig. 2, Hao Yixing 1757-1825, reasoning that 体 was a common calligraphic shorthand for 體 'body'), 喬 in jiāo < kjāu < \*kjog P 'culter, Culter alburnus' (fig. 4, Chen Dazhang, fl. 1681, cf. \*djang'jog  $\S1.6$ ), or 本 in qiáo < kjàu < \*kjog  $\kappa$  'a fish' (Wang Xianqian 1842-1917, cf. Zihui in table 1). The latter two interpretations of N in terms of the homophonous \*kjog P 'culter' (also glossed as  $t\bar{a}o < t'\hat{a}u <$ \*t'og by Chen Dazhang) or \*kjog  $\kappa$  are most likely. Furthermore, there is similarity between \*d'iôgkjog B N and the \*djang'jog 陽橋 name (using the \*djan 陽 'sun(ny)' in \*b'jôgdjan 浮陽 "play in the sun").

## 1.4 Huainanzi's Γ魚 and B魚

The (ca. 140 B.C.E.) Huainanzi 淮南子 [Masters of Huainan] is a philosophical compilation attributed to Liu An (d. 122 B.C.E.), Prince of Huainan. The fact that this heterogeneous text writes \*DZIOG as both \*â'jôkŋjo

<sup>12.</sup> One earlier explanation can be rejected from the context of a fish name rather than a \*b'wât 'splash' onomatope. Yang's Xunzi commentary assumes N to be  $b\acute{a} < b'u\^{a}t < *b'w\^{a}t + \theta$ , a variant (Shijing 57/4, Karlgren 1964, no. 173) for  $b\~{o}b\~{o} < pu\^{a}tpu\^{a}t < *pw\^{a}tpw\^{a}t \ref{minimal}$  'plop-plop; sound of fish tails splashing'.

<sup>13.</sup> The Brya (16/11) defines  $pi \sim p\bar{i} < b'ji < *b'jer \iota$  as a large  $h\bar{\iota} < 200 - < *g' \hat{k} = g \beta$  'catfish, Leiocassis longirostris' (fig. 12). Hao glosses  $h\bar{\iota} = \beta$  and  $h\hat{\iota} = \beta$  to be northern and southern dialectal terms for 'catfish'. Another Brya definition (16/23) identifies  $\bar{N}$  as the fang  $\bar{m}$  'bream, Megalobrama terminalis' (cf. §1.6).

<sup>14.</sup> This is the source of Knoblock's translation and he notes (1988:288) it also meant "white-bellied shad" (Shuowen), or "snakefish" (Erya), yet both these early dictionaries seem to define as the 'snakehead, Channa argus'.

 $\Gamma \triangleq \text{and } *d'i\hat{o}g\eta jo \implies \text{B} \triangleq \text{shows these graphic variants were freely interchangeable during the early Han period.}$ 

Both contexts describe the \*DZIOG-fish as elusive, probably alluding to the Zhuangzi §1.2 "happiness of fish." The former mentions bùdé 不得 'not get/obtain' the Dao (~ Tao) and the latter bùnéngdé 不能得 'cannot get/catch' the fish. The first is:

To fail to obtain Tao is like watching [ $\Gamma$ 魚] minnows. The Sage therefore is like a mirror, neither sending [things] away nor welcoming [things], responding but not storing. Thus, he undergoes Ten Thousand Changes without the slightest injury. He who [stops to think he] has obtained it (Tao) has just lost it; but he who [thinks he] has lost it, has he not just obtained it? (6/4a, tr. LeBlanc 1985:135)

Gao Yu (fl. 205-212) comments that \* $\hat{a}'i\hat{o}k\eta io$   $\Gamma$ 魚 is "a small fish that can be glimpsed in the water, but is very difficult to catch, like the Dao." The second context says:

You can fish for [B魚] minnows in the river every day and still not catch one. This is not because the fish are not biting, it is because they do not want the bait. Now a skillful angler uses a rod to cast bait right onto the fish's lips, and will catch the fish if it likes the bait. 15 Is there anything that cannot be accomplished? Can anyone accomplish it? (18/20a-20b)

Gao concludes "Anything can be accomplished with the proper techniques," but "An incapable person cannot do it."

These two *Huainanzi* and passages describe the \*DZIOG as being difficult to catch (cf. \$1.6) and there is an obvious analogy with happiness.

## 1.5 Shanhaijing's Γ魚 and Γ

The Shanhaijing 山海經 [Book of Mountains and Seas] is a collection of early Chinese geographic myths and legends. This long-neglected text records a mythical \* $\hat{a}j\hat{o}k\eta jo$   $\Gamma$ 魚 bird-fish (associated with dragons, Carr 1990:109) which, when eaten, supposedly cures sorrow, and it describes two other fish as resembling \* $\hat{a}j\hat{o}k$   $\Gamma$ . In all three cases, the commentary of Guo Pu (276-324) says  $sh\hat{u} < \hat{z}juk < *\hat{a}j\hat{o}k$   $\Gamma$  'sudden; hasty' is a graphic loan for \*d'iôg B. 16

<sup>15.</sup> Compare Lorden's (1924:136) description of Hemiculter leucisculus (fig. 9), "But the great charm about the knife fish is the delightful way he rises to the artificial fly."

<sup>16.</sup> Guo's 江子賦 "Rhapsody on the Yangzi River" lists myriad fish including the H (1. 108, tr. Knechtges 1987:329 "hemiculter") which Li Shan notes resembles an eel.

The first context is the only extant record of the legendary shùyú  $\langle \dot{z}_{juknjiwo} \langle * \dot{a}_{joknjio} \Gamma \otimes \dot{a}_{joknjio} \rangle$ 

The Peng River flows down from Mt. Tai and west into the Pihou River. In it there are many  $*\hat{C}li\hat{O}k$  fish  $[\Gamma ]$  which resemble chickens, have red hair(?), three tails, six feet/legs, four heads/eyes, 17 and make a sound like a magpie. Bating them will  $[\Box ]$  stop melancholy. (3/1b; tr. Schiffeler 1978:111 "Azure-black fish")

The alleged effect of eating this bird-fish is to cure  $y\bar{o}u < ^?j\varrho u < *^?j\hat{o}g$  'melancholy; sorrow; grief; anxiety', an Old Chinese antonymic wordplay with the \*DZIOG 'happy' fish.

The other two Shanhaijing contexts refer to shù < źiuk < \*đjôk  $\Gamma$  fish rather than legendary \*đjôknjo  $\Gamma$ 魚.

In the Fen River ... there are many \*ts',  $\tilde{E}$ r' fish [ $\Pi$ M] 'anchovies' which resemble \* $d\tilde{\mu}$ ok' [ $\Gamma$ ], have red scales, and make a sound of chì < ts',  $\tilde{E}$ t',  $\tilde{$ 

In the Zhi River ... there are many \* $\hat{L}i$ em fish [飯魚] 'needlefish' which resemble \* $\hat{d}i\hat{o}k$  [ $\Gamma$ ] (tr. Schiffeler 1980:51 "hemiculters") and whose snouts are comparable to [蔵] needles. Eating them will prevent epidemic diseases. (4/1b)

Jìyú < ts'ienjwo < \*ts'jarnjo П魚 is the 'estuary tapertail anchovy, Coilia nasus' (fig. 3); zhēnyú < tśjemnjwo < \*tjemnjo 飯魚 "needle fish" (now written zhēn X with the 魚 "fish radical" & this 箴 phonetic) is the 'needlefish, Hyporhamphus sajori' (fig. 11).

The compilation of the Shanhaijing began sometime around third century B.C.E. and continued up through the Han dynasty (Schiffeler 1978:ii), but it presumably drew upon earlier sources. There is no way of ascertaining whether the myth about a fish with melancholy-relieving properties existed before/after the (ca. 2nd cent. B.C.E.) Zhuangzi "happiness of fishes" story.

## 1.6 Shuoyuan's 陽橋

The (ca. 20 B.C.E.) Shuoyuan 說苑 [Garden of Sayings], edited by Liu Xiang (77-6 B.C.E.), tells this story about the Confucianist Fu Zijian (cf. the Yan Hui allegory in \$1.2). On way to his new post as Minister of Danfu (in the state of Lu), Fu requests advice from Yang Shu:

Yang said: "Although I am young, you don't know the technique of governing people. There

<sup>17.</sup> This 毛 'hair' could conceivably mean 'feathers' or 'scales' and some § 2.1 dictionaries quote with a variant 尾 'tail', but that is incompatible with the following 三尾 "three tails." Wang Niansun and Hao Yixing say the received Shanhaijing text with four 目 'eyes' was originally written 首 'heads'.

are two Daos of fishing. May I impart them?"

Fu asked: "What do you mean by the Dao of fishing?"

Yang answered: "The fish that pulls on the line and mistakenly goes to swallow the bait is the \*diang'iog [陽橋]; as a fish, it is skinny and unattractive. The one that [considers] whether it will live or die, whether it should eat the bait or not, is the \*b'iwan [節 'bream']; as a fish, it is fat and rich tasting."

Fu said: "Excellent!" On his way to Danfu, he saw an official crossing the road to meet him. He told his chariot driver, "Run him down! Run him down! This is truly what Yang Shu meant by a \* dispkics" After arriving, he assembled all the old, wise, and virtuous people in Danfu, and governed together with them. (7/14a)

This moral about easily obtainable fish (metaphorically = people) being undesirable contrasts the yángqiáo < jang'jàu- < \*djang'jog 陽橋 with the fáng < b'jwan < \*b'jwan th' 'Chinese bream, Megalobrama terminalis' (fig. 14).

Instead of qiáo < g'jāu < \*g'jog 橋 (木 "tree/wood radical" & qiáo 喬'tall' phonetic) 'crossbar; bridge', later dictionaries wrote this fish as jiǎo < kjāu: < \*kjog P 'culter, Culter alburnus' (魚 "fish radical" & same qiáo 喬 phonetic). But since the best Shuoyuan textual versions write \*djang'jog 陽橋 "bright bridge" rather than \*djankjog 陽 P "bright culter," it seems that \*djang'jog was a binomial appellation akin to \*d'iôgkjog? B N \$1.3. The Bencao gangmu entry for báiyú 白魚 'culter' explains !9:

the character [白] for white is also rendered T, because it is white in colour. It is called  $qi\acute{ao}$  衢 ['tall; high'] because the head and the tail turn upwards. Liu Han states that it is a white river fish with upturned head. A large fish six to seven feet long. Li [Shizhen] states that the culter has a narrow body, with a flat belly, fine scales, and the head and tail are turned upwards. There are fine bones among the flesh. (tr. Read 1939:20-1)

Because of resemblance to jiǎo P Culter, the tiáo is zoologically identified as Hemiculter (see §3.1). The Shuoyuan's easily-caught \*diang'iog 陽橋 apparently contradicts the Huainanzi's §1.4 elusive \*d'iôgnjo B魚. These

<sup>18.</sup> Yangqiao 隔橋 "bright/sunny bridge" (cf. this sage Yang Shu 陽書 "Bright Writing") was an ancient place name in Lu, like Danfu above. The "bridge" on which Zhuangzi and Huizi stood §1.2 was called liáng < \* liang 梁 'beam; bridge; dam'; the oldest recorded usage (Zuozhuan, Cheng 2, Legge 1872:348) of qiáo < \*\*g'iog橋 'crossbar' to specifically mean 'bridge' refers to Yangqiao. 橋 was also used to write jiào < \*kiog 'well-sweep' ~ jiǎo < \*kiog 'energetic', and the latter sounds like 陽橋 "bright and energetic" meant 'happy (fish)'.

<sup>19.</sup> The Bencao gangmu additionally identifies P as  $b\acute{o}y\acute{u}$  白魚 "white fish" generally or 'glassfish, Salangichthys microdon' specifically (fig. 22, cf. §1.2). The variant  $z\~{o}u$  T (魚 "fish radical" Ł 取 'take' phonetic) was semantically extended from "small fish" to 'petty person' (cf. English small fry).

could have been two different fish (perhaps culter and hemiculter), and Guo Pu equates the \*djang'jog with the \*djoknjo  $\Gamma$   $\triangleq$  bird-fish \$1.5.

## 1.7 Summary

In these Chinese classics, \*DZIOG-fish had monosyllabic names of A (Shijing),  $\Gamma$  (Shanhaijing), and  $\Delta$  (Zhuangzi); bisyllabic \*d'iôgkjog? BN (Xunzi) and \*djang'jog 陽橋 (Shuoyuan) names, plus B魚 and  $\Gamma$ 魚 (Zhuangzi, Huainanzi, Shanhaijing) suffixations with \*njo 魚 'fish'. In addition, \*d'iôg B  $\sim \Gamma$  was a proper name Chou in the (ca. 300 B.C.E.) Zuozhuan 左傳 [Zuo's Commentary/History]; 20 and the \*DZIOG-fish had variant writings like \*djôg H (魚 "fish radical" & yóu < jgu < \*djôg 由 'from' phonetic) in the (320) Baopuzi [Master Who Embraces Simplicity]. A description of narrow-mindedness says:

[Ignorance of the Dao], alas, may be called holding a lighted torch within an enclosed space but not noticing the brilliance of the luminaries in heaven; or associating with [H] little fish and crabs in the shallow water and thus knowing nothing about the vast floods of the four seas. (10/2a, tr. Ware 1966:167)

From this context with  $xi\bar{a} < \gamma a < *g'a$  鰕 'shrimp; crab', the \*djôg H was a 'small; insignificant' fish.

Variant logographs and pronunciations have complicated the \*DZIOG-fish's word-history. First, the standard logograph for \*d'iôg is A or B; but early texts wrote it  $\Delta$ , H, or \*âjôk  $\Gamma$ ; and later dictionaries  $\Theta$  or Z. Like most Chinese fish names, \*DZIOG graphs are written with the 魚 "fish radical" — except for the graphic loan \*âjôk  $\Gamma$  'rapid' with 黑 'black'. 21 The Erya (table 1) commentary of Hao Yixing (1757-1825) proposes this 黑 in  $\Gamma$  was a miscopy of the 魚 in B. The most common phonetic element in \*DZIOG logographs is  $y\bar{o}u < igu < *diôg$  'where; whereby; who' (in B,  $\Delta$ , and  $\Gamma$ ), elaborated with the  $\pi$  "tree/wood radical" into tiáo < d'ieu < \*d'iôg & 'branch;

<sup>20.</sup> The personal name Bo ("Elder/Uncle") Chou 伯B is mentioned twice: (Xi 23 [637 B.C.E.], tr. Legge 1872:186) The Duke of Jin's son "took [Ji] Wei to himself as his wife, and she bore him [Bo Chou]," and (Xuan 3 [606 B.C.E.], tr. Legge 294) a pregnant concubine dreams about being given a symbolic orchid and told "I am [Bo Chou]. I am your ancestor." The place name Chou/You B was a city in Yong 庸 on the border between Jin 普 and Zheng 鄭, in present day Hebei and Henan: (Wen 16 [611 B.C.E.], tr. Legge 275) when Chu 楚 was fighting Rong 戎: "only the men of [Pi, Chou], and Yu [魚 "fish"] were actually employed to drive them off" and (Wen 17 [610 B.C.E.], tr. Legge 278), the Marquis of Qi promises "We will raise all our poor levies, and await you at [Chou]."

<sup>21.</sup> This  $\dot{\sin}$  〈  $\dot{\sin}$  〈  $\dot{\sin}$  〈 \*  $\dot{\sin}$  〉  $\dot{\sin}$  〉 'rapid; sudden' was graphically simplified to 倏 with 犬 'dog' in place of 黑 'black'.

extended, spread out' (the phonetic in A).  $^{22}$  Less commonplace phonetics are  $li\check{a}o < lieu: <*li\^og$   $\ref{lieu}$  'clear' (a graphic simplification of the eleven-stroke 條) in Z,  $y\acute{o}u < igu <*di\^og 由$  'follow; from' in H [today meaning 'scorpionfish,  $Scorpaena\ izensis'$  (fig. 23)],  $qi\acute{u} < zigu <*dzi\^og \( \mathbb{O} \) 'arrest; prisoner' in <math>\Theta$ , and  $z\acute{u} < tsuet <*tswet \( \mathbb{P} \) 'soldier; end' in *<math>tsiwet$  K. Hao Yixing likewise proposes a graphic confusion between the  $\square$  and  $\square$  phonetics in  $\square$  and  $\square$  and  $\square$  .

Second, these disparate phonetics reflect complexities of \*DZIOG's Old Chinese pronunciation, glossed by Guo Xiang (ca. 300, see \$2.2) as \*d'iôg, \*d'jôg, or \*siôg.  $^{23}$  Compare Karlgren's Old Chinese \*d'iôg reconstruction for A and B with: \*d'jõg (Dong Tonghe), \*diew B vs. \*deew A (Zhou Fagao), \*diegw (Li Fanggui), and \*gliew (Axel Schuessler). The alternative names of \*âjôk  $\Gamma$ , \*djang'jog 陽橋, \*d'iôgkjog? BN, \*tsjeg I, and \*dzjôg  $\Theta$  suggest a more phonologically complex origin for this fish name. \*DZIOG possibilities could include consonant clustered \*dgljôg, bisyllabic \*degjog, etc..

Having examined lexicology of the \*DZIOG name, we can now approach the central topic of how this fish is defined and translated.

## 2 LEXICOGRAPHY OF TIAO

Dictionary definitions and translations of the  $ti\acute{ao} < *DZIOG$  A  $\sim$  B minnow provide a historical microcosm of Chinese lexicography. The following first compares monolingual definitions from early \$2.1 and modern \$2.2 Chinese dictionaries, and then parallels bilingual translation equivalents from Japanese \$2.3 and European languages \$2.4. Tables 1-4 chronologically list definitions and equivalents from 68 dictionaries, both  $zidi\check{a}n$  字典 'character/logograph dictionaries' and  $cidi\check{a}n$  辞書 'word dictionaries'. Since it would be repetitious to list all the Chinese dictionary definitions of \*DZIOG variants, for the sake of brevity, the focus is upon A and B definitions from major texts (mentioned in the literature, Tōdō 1958, Liu 1963, Yang 1985, inter alia). The ensuing is not a macrohistory of Chinese dictionaries, but an outline of evolution in lexicographic methodology.

<sup>22.</sup> The *tiáo*'s 'long thin' shape was lexicalized in *tiáoyú* 條無 "branch fish" and *báitiáoyú* 白條 魚 "white branch fish" names in table 1. This *tiáo* 'branch' is the Chinese numerative for long and narrow things (e.g., roads, cords, legs, trousers, snakes, fishes, dragons, etc.).

<sup>23.</sup> The 攸 phonetic series anciently had a few \*S-initials, e.g., xiu < sieu < \*siog 條 'adorn; prepare; cultivate' and xiu < sieu < \*siog 脩 'dried meat; shrunk; long'.

## 2.1 Early Chinese Dictionaries

 $Ti\acute{ao} < d'ieu < *d'i\acute{o}g$  definitions from the eleven dictionaries listed in table 1, changing from short synonym glosses to detailed descriptions, give an overview of traditional Chinese lexicography from 200? B.C.E. to 1716. To establish the development of early graphic variations, in addition to citing all A and B definitions, table 1 lists the first definitions of \*DZIOG variants (e.g.,  $\Theta$  in the Erya).

## Table 1 — Early Chinese Definitions

DEFINITION(S) DICTIONARY 【❷】黒Ⅰ. Erva 【B】B魚[名]也从魚攸聲. Shuowenjiezi 【K】B也. Guangya Yupian 【 $\Theta$ 】似由切魚也或作H. 【 H 】直留市由二切魚名. 【A】音條魚名. 【B】徒尭切白 $\Gamma$ 魚也似雞赤尾[sic]六足四目又直流切。 【H,△】以周切 ... ΘH小魚. Guangyun 【H】市流切 ... 魚名又直留切. 【H】直由切 ... 魚名又音由. 【B】直由切 ... 魚子又魚名也. 【A】徒聊切 ... 白A魚名. 【B】夷周切 ... 白魚也. Jiyun 【B】陣留切 ... 説文魚名一曰魚子或書作△. 【A】田聊切 ... 白A魚名或作B△. 【A】先了切 ... 魚名或从了亦作△. 【乙】朗廌切 ... 魚名. 【A】A魚形狭而長若條然故曰A也今江淮之間謂之M魚性浮似α而白蓋α从當M謂之 Piya 餐其義一也詩曰A a n 鯉先A後a 先n後鯉者 a 大於A 鯉大於n 亦其美之遞不知也. 【A】A白A也其形織長而白故曰白A又謂白B江東呼為Θ釋魚Θ黒I是也此魚好遊水 Bryayi 上故莊子觀於濠梁稱B 魚出游從容以為魚樂明遂其性也淮南子曰不得其道若觀Г魚望 之可見即之不可得此魚好遊也而詩潛有多魚有Ω有鮪Aαπ龑潛者ø也積柴水中令魚依 之止息因而取之爾雅曰[sic]魚之所息謂之v蓋潛之詩謂季冬及春寒気方盛故魚止�中 因而薦之非其出遊之時今人謂A為参魚参音近ø或以其伏ø中得名耶去其陽作機謂參魚 鱶又謂其魚為肉條魚. 【B,A】于求切音由魚名又田聊切音迢義同又除留切音酬人名 〔左傳〕 晉公子取委魏生 Zihui

伯B又後漢劉B.

【A】田聊切音迢白A形狭而長若條性浮似α而白〔詩周頌〕Aαη鯉.

Zhengzitong

【A】田聊切音迢白A形狭而長若條然詩周頌Aαn鯉毛傳白A也本作B.

【B】易求切音由小白魚俗稱呂魚亦曰参條魚小而長時浮水面性好遊故名莊子觀于濠梁 B魚出游從容以為樂淮南子曰不得其道若觀B魚望之可見即之不可得又蕭韻音迢愈同又 尤韻音酬人名左傳晉公子取委隗生伯B又後漢劉B又地名左傳文十七年將悉敵賦以待于 B注晉鄭之境又山海經帯山彭水西流至W湖其中多B魚状如鶏赤毛三尾六足四目其音如 鵲食之已憂郭璞B魚質涸和損平莫慘于憂詩咏ο草帯山則B壑焉遺岱聊以盤遊按ω湖之 B形近怪與莊子淮南所謂B同名殊類篇海合為一誤.

Kangxi zidian

【B】〔唐韻〕以周切〔集韻〕夷周切从音由〔説文〕魚名〔集韻〕與H同〔莊子秋水篇〕B魚出游〔音意〕即白B魚也〔淮南子號冥訓〕不得其道者若觀B魚〔注〕B魚小魚〔正字通〕俗呼參條魚長而小時浮水面性好遊故名又〔山海經〕帶山彭水西流至 ω湖其中多B魚其状如鶏赤毛三尾六足四目其音如體〇按與莊子淮南子別是一種又地名〔左傳文十七年〕將悉敝賦以待于B〔注〕B晉鄭之境又人名左傳晉公子伯B後漢劉B又〔廣韻〕直由切〔集韻〕〔韻會〕陣留切〔正韻〕除留切从音儀義同又〔集韻〕〔正韻〕从田聊切音迢本作A詳A字注。

【A】 (廣韻) 徒聊切〔集韻〕 (韻會〕 (正韻) 田聊切从音迢白A魚名 (正字通) 形狭而長若條然 (詩周頌) Aαη鯉〔傳〕白A也〔集韻〕或作BΔ又〔集韻〕先了切音小義同。

The oldest extant Chinese dictionary, the ca. 200 B.C.E. Erya 開雅 [Approaching Refined/Correct (Language)] is semantically organized into nineteen chapters/sections. For example, the last seven define names of plants, trees, insects, fish, birds, wild, and domestic animals. The sixteenth, "Explaining Fish [Names]," has 43 definitions with 77 names of aquatic creatures ("fish" in a general sense including amphibians, crustaceans, and reptiles) and most are definiendum-definiens pairs like:

The  $qiú < zj\varrho u < *dzjog \Theta$  [is/means] the  $h\bar{e}iz\bar{i} < X\theta ktsi < *Xm\theta ktsjeg <math>\mathbb{H}$  I "black \*tsjeg."

The Erya evidently originated as an assemblage of glosses from classical texts, and it defines about 2200 terms, many of which are rare graphs or hapax legomena like \*tsjeg I .24 The first Erya commentary by Guo Pu (276-324, cf. §1.5) notes this is the "白B魚 white \*d'iôg-fish, called qiú < zjeu < \*dzjôg  $\Theta$  in Jiangdong [present day Jiangsu and Zhejiang]."25 Commentators diversely attempted to explain this black/white contradiction. Zheng Qiao (1104-1162) reasons that since the  $z\bar{\imath} < tsi < *tsjeg I$  ("fish radical"  $\triangle$  \*tsjeg  $\triangle$  'black' phonetic) had  $z\bar{\imath} < tsi < *tsjeg <math>\triangle$  'black' spots on its back, it could not be the same as the white  $qiú < zjgu < *dzjôg \Omega$ . The Zhengzitong below plausibly suggests the  $z\bar{\imath}$  m 'gray/striped mullet, Mugil cephalus' (fig. 16). Hao Yixing (1757-1825, cf. §1.3) proposes the  $\triangle$  logograph in this Erya definition was miscopied from  $\Gamma$  (with the  $\triangle$  "black" rather than the  $\triangle$  "fish radical"), implying an original "\*dzjôg \Omega and \* $\partial$ jôk  $\Gamma$  [are/mean] \* $\partial$  \* $\partial$  \* $\partial$  definition. Even though Shi's (1990:42) study of Erya fish names gives

<sup>24.</sup> Guo (1980:124) says 2190 terms, Xue (1982:152) says 2091. The Eryz dates from the third century B.C.E. or earlier. Han dynasty scholars viewed the text as one of the JIR \*\* 'classics', and officially canonized it in the (90 C.E.) Han History bibliography section. Since I is not recorded before the Eryz, two explanations are that it glossed an early transcription of A in the Shijing, or came from some ancient text lost in the 213 B.C.E. "Burning of the Books."

<sup>25.</sup> The *Brya* commentary of Xing Bing (931-1010) confirmed the Zhejiang dialectal usage seven centuries later. Does it continue in the present day?

'Hemiculter leucisculus' (fig. 9), one solution to the black/white problem would be \*dzjôg ⊕ meaning 'pale chub, Zacco platypus' and "black" \*Xmektsjeg 黑 I 'dark chub, Z. temmincki' (figs. 29 and 30). In Western lexicographical terminology, the Erya is more of a synonym thesaurus (a "synonymicon," von Rosthorn 1975:138) than a full-fledged dictionary like the next.

The ca. 100 C.E. Shuowenjiezi 說文解字 [Explaining Graphs and Analyzing Logographs] was edited by Xu Shen (58-147?) into 540 logographic radicals (Creamer 1989). For a dictionary user, it is easier to look up a logograph (esp. an unknown one) in a word-book organized by graphic classifiers than in one divided by Erya-like semantic fields. The Shuowen arranges its 540 radicals by both cosmological principles and graphic similarities, 26 but the system can seem (Thern 1966:4) "illogical." For example, the Shuowen 魚 "fish radical" (no. 424) is understandably subsumed under a "watery" syllogism: preceded by radicals for 水 "water" (410), 川 "river" (415), 雨 "rain" (422), 雲 "cloud" (423), and followed by ones for 燕 "swallow" (426 [believed to transform into a]), 龍 "dragon" (427), and 飛 "to fly" (428). Xu's postface says the Shuowen defines 9353 logographs plus 1163 graphic variants, but, owing to many textual redactions (Miller 1953:156-200), modern editions have 9431 plus 1279. The "fish radical" section defines 103 logographs (not the Erya's  $\Theta$  or I) including:

 $Ti\acute{ao} < d'ieu < *d'i\^og$  B, a fish (name), derived from the fish [radical] and a  $ti\acute{ao} < d'ieu < *d'i\^og$  攸 phonetic.

Some Shuowen texts gloss "魚也 a fish" and others "魚名也 a fish name." The renowned Shuowen commentator Duan Yucai (1735-1815) analyzed classical \*DZIOG references and concluded that the one  $A \sim B$  fish mentioned in the Shijing, Erya, and Zhuangzi was different from the legendary other  $\Gamma$ 魚 in the Shanhaijing. He noted a current tiáo pronunciation and old chóu and diú ones.

The ca. 230 Guangya 廣雅 [Extended/Enlarged (Er)ya],  $^{27}$  edited by Zhang Yi, defines 18,150 logographs and follows the Erya organization of vocabulary into nineteen semantic chapters. The sixteenth "Explaining Fish [Names]" defines 29 terms not found in the Erya,  $^{28}$  including the first appearance of

<sup>26.</sup> Xu's postface (tr. Thern 1966:75-6, cf. Miller 1953:277-8) explains: "When I established the categories, I chose 'one' ( $yi \longrightarrow$ ) to be the first, [the Book of Changes says] 'The similar are grouped together, the different are separated'. Graphs of the same category can be linked. If they have common principles, they are strung together."

<sup>27.</sup> The Guangya is also known as the Boya 博雅 [Extended/Wide (Br)ya] because the pronunciation commentary of Cao Xian (541-645?) was entitled Boyayin 博雅音 owing to taboo on the personal name Guang of Sui emperor Yang (r. 605-617).

the "dictionary word" jù K (魚 "fish radical" & 卒 phonetic):

The ju < tsjuet < \*tsjwet K [is/means] the  $ti\acute{ao} < d'ieu < *d'iog B$  [or  $\Gamma$  in some editions].

Wang Niansun's (1744-1832, cf. §1.3) commentary quotes B's early textual usages, but admits unfamiliarity with  $j\dot{u}$  K, unless it was wei m 'beaked sturgeon' as noted in the *Guangyun*, which he justly doubts as "source unknown."

The Yupian 玉篇 [Jade/Precious Tablets] was originally edited ca. 543 by Gu Yewang (519-581), revised in 760 by Sun Jiang and Fu Chun, and redacted by Chen Pengnian as the 1013 Daguang yihui yupian 大廣益會玉篇 [Enlarged and Revised Jade Tablets]. It defines 16,917 logographs, including many graphic variants (eight for the \*DZIOG-fish), and is arranged into a 542 radical system, adapting the 540 in the Shuowen more in line with the Erya's semantic fields. The "fish radical" section (no. 397), for instance, is placed between "bird" and "rat radicals," and defines 321 "fish" logographs. While the Shuowen occasionally gave pronunciations in terms of logographic phonetics, the Yupian was the first dictionary to give systematic pronunciation glosses in făngie 反切 "cut and splice." This is the traditional Chinese "spelling" method of phonetic notation, using two logographs to represent the initial and final pronunciations (Norman 1988:27-8).<sup>29</sup> For example, it glosses ⊕ as "似由 切," denoting the initial of si < zi: 仅 "cut [and spliced]" with the final of yóu < igu 由, i.e., pronounced shóu < zigu. The Yupian has the first definition of the variant H logograph:

- $\Theta$ , shóu  $\langle zj \rho u$ , a fish, also written H.
- H,  $ch\acute{o}u < \acute{a}'i \not p u \sim sh\acute{o}u < \acute{z}i \not p u$ , a fish name.

It writes the Shuowen B as A, and takes B to be the bird-fish written  $\Gamma$  in the Shanhaijing §1.5; defining:

- A, tiáo < d'ieu, a fish name.
- B, tiáo < d'ieu  $\sim$  chóu < dieu, the white  $\Gamma$ , resembling a chicken with a red tail, six feet, and four eyes.

A is glossed with (cf. Shuowen above) 音條 'pronounced tiáo' instead of with a fănqiè like most the others; and the received Shanhaijing text has "red hair" and "four heads." The Yupian defines this cross-referenced  $\Gamma$  — also its definiens for K "子律切下也, zù < tsjuět, the  $\Gamma$ " — not as a fish name

<sup>28.</sup> This fish chapter has the first definition of  $ji\ddot{a}o < kj\dot{a}u$ : P (see §1.3) as the  $b\acute{o} < b'ak$  T 'culter'.

<sup>29.</sup> The farqie system is traditionally assigned to Sun Yan (220-264), who, under the influence of Sanskrit scholarship, used "cut and splice" glosses in his Erysyin 開雅音 [Erys Pronunciations].

but as "他狄切又大的尸育二切「禍毒也青黑  $\sigma$  也急疾也, ti < t'iek or broadly shù < siuk, disaster; blue-black silk; urgent." These internally inconsistent  $\Gamma$  definitions, along with the irregular  $\Theta$  and H A "fish" and A "fish name" definitions, reveal the Yupian's textual heterogeneity. 30

The 1007-1011 Guangyun 廣韻 [Extended/Enlarged Rhymes], edited by Chen Pengnian, Qiu Yong, et al., was based upon the no longer wholly extant 751 Tangyun 唐韻 [Tang (Dynasty) Rhymes] and Lu Fayan's 601 Qieyun 切韻 [Cut (i.e., făngie) Rhymes]. These pronunciation dictionaries are the cornerstone upon which Chinese historical phonology was reconstructed. The Guangyun defines 26,194 logographs, organized according to 206 final syllables (Karlgren 1954). The major sections of the four Middle Chinese tones (ping 平 'level', shăng上 'rising', qù 去 'departing', and rù 入 'entering') are subdivided into 206 rhyme groups with identical finals, and further organized by grouping together variants, synonyms, and graphs with the same radical. It gives a definition and a fănqie for the headword (called the yùnmù 韻目 "rhyme eye") in each homophonic group, and definitions for subsequent entry-words. For example, most \*DZIOG names (along with a few other fish names, e.g., Modern  $qi\bar{u}$  < Middle  $ts'i\varrho u$  餡~椒 'loach', fig. 15) are found under the yóu < jigu [< 0ld \*gjôg] 尤 rhyme heading (no. 18 in part 4 'level tone'). This dictionary was first to define  $\Delta$  as identical with H:

H,  $y \acute{o} u < i \varrho u$ ,  $\Theta$  or H, a small fish.

 $\Delta$ , same as above.

H, xiú < źjęu, a fish name, also pronounced chóu < đ'jeu.

H, chóu < d'igu, a fish name, also pronounced you < igu.

B, chóu < d'igu, roe, also a fish name.

A, tiáo < d'ieu, the 白A white tiáo, a fish name.

This yúzǐ 魚子 "fish baby" 'roe' is the inversion of the Zhengzitong's 'gray mullet' dialectal name zǐyú 子魚 'zǐ-fish'. The Guangyun defines (not shown in table 1) the \*DZIOG synonym K as:

子律切B鮪別名, zù < tsiuĕt, alternative name for tiáo < d'ieu B, or for wěi < jwi: 鮪 beaked sturgeon.

This is the first identification of \*DZIOG with 'paddlefish, beaked sturgeon, Psephurus gladius' (fig. 20; mentioned in the Shijing §1.1 context), but the Guangyun focuses more upon pronunciations than meanings. It has inefficiencies like three yóu, chóu, and xiú H definitions, or defining  $\Theta$  and A as what are probably the same "white \*DZIOG": báichóu < b'akd'igu  $\Theta$  B and báitiáo < b'akd'ieu  $\Theta$  A.

<sup>30.</sup> The Yupian has the first definitions of two logographs associated with \*DZIOG in later dictionaries; "Z, xi $\ddot{a}o$ < si $\ddot{a}u$ ;, a fish" and " $\Lambda$ , li $\dot{e}$ < li $\dot{a}p$ , a fish name."

The Jiyun 集韻 [Collected Rhymes] was compiled under imperial mandate by groups of Song dynasty scholars, beginning with Ding Du in 1037 and ending with Sima Guang in 1067. It defines what Norman (1988:72) calls an "extraordinarily large number" of 53,525 logographs, including many graphic variants, the largest number in any Chinese dictionary up to the present day Hanyu dazidian. The Jiyun follows the Qieyun organization into rhyme groups of 206 finals, and its definitions largely incorporate the Shuowen and other early dictionaries. Most \*DZIOG definitions are found under the you < jiqu 尤 rhyme heading, including two for B:

B, you < igu, a white fish.

B, chóu < 3'igu, the Shuowen [says] "a fish name," also said to be "fish roe," also written  $\Delta$ .<sup>31</sup>

Definitions under other rhyme groups include the first, though indirect, identification of Z (cf. "a fish [name]" in Yupian and Guangyun) as the \*DZIOG:

A,  $ti\acute{a}o < d'ieu$ , the white  $ti\acute{a}o$ , a fish name, also written B or  $\Delta$ .

A, xião < sjâu:, a fish name, also from a ? phonetic [in Z], also written  $\triangle$ .

Z, lião < lieu:, a fish name.

This 'fish roe' definition of B is copied from the Guangyun, along with defining K as: "即聿切魚名  $\Gamma$ 也一日鮪別名, zù < tsiuĕt, a fish name, the  $\Gamma$ , also said to be an alternative name for the wĕi < jwi: 鮪 ['beaked sturgeon']." The Jiyun is the first dictionary to define B as a variant for  $\Gamma$ .  $^{32}$ 

The Piya  $\psi$  雅 [Increased/Revised (Er)ya], edited by Lu Dian from 1078-1085, comprises eight chapters dealing mainly with plants and animals; corresponding to the latter part of the Erya (Carr 1979:38-9). "Fish" come

<sup>32.</sup> B is defined as "武竹切脱文南黑 σ 発白色一曰黑也一曰 Γ B 罹禍毒也, shú < śiuk, the Shuowen [says] 'blue-black', gives off a white color, also said to be black, also said to be BB [ΓΓ in the Erya], trouble and disaster"; and Λ as "力涉切魚名, liè < liàp, a fish name". The Jiyun misquotes the Erya with jū < tsiwo < \* tsio μ (且 instead of 囚 phonetic); I, "津之切魚名爾雅 μ 黑 I, zī < tsi < \* tsieg, a fish name, the Erya [says] '\* tsio μ is the black \* tsieg."

first, followed by "Wild Animals, Wildfowl, Insects, Horses, Trees, Plants, and Heaven." Xue (1982:154) describes the *Piya* to give "particularly detailed definitions of terms for plants and animals." Many of its thirty fish definitions involve folk etymologies like *tiáo*:

The name  $ti\acute{ao} < d'ieu$  A is owing to this fish's narrow shape that resembles a long  $ti\acute{ao} < d'ieu$  條 'branch'. In the area between the Yangtze and Huai Rivers, it is nowadays called the  $c\~{an} < ts' an$  M fish. It has a playful disposition and resembles the  $ch\acute{ang} < \acute{z}ian$   $\alpha$  fish, but is white. The name  $\alpha$  comes from [its phonetic]  $ch\acute{ang} < \acute{z}ian$  a 'taste' and the name M from [its phonetic]  $c\~{an} < ts' an$  a 'eat; meal' and both are synonymous. The Shijing says a a a a [§ 1.1 "Long-fish, yellow-jaws, mud-fish and carp" {in this order}] because  $a'i\^{og}$  A is smaller than a'ian a, and a'ian a is smaller than a'ian a is smaller than a'ian a and a'ian a is smaller than a'ian a is unknown.

This is the first identification of  $c\bar{a}n \ M \sim \Xi$  with  $ti\acute{a}o$ . In Modern Chinese,  $ch\acute{a}ng < \acute{z}ian \ \alpha$  is a catfish, 'yellow croaker, Silurus asotus' (fig. 24).

The 1174 Eryayi 開雅翼 [Erya Wings/Assistance], edited by Lo Yuan (1136-1184), has an even more detailed description:

Since the  ${f A}$  is a long, narrow, white fish, it is called blphaitilphao  $f i{f A}$  "white branch" or blphaiylphau etaB. It is called qiui < zigu $\Theta$  in Jiangdong, and is the  $\Theta$ 黑I defined in the Brya. Since this fish likes to play on the water's surface, Zhuangzi watched them on the bridge above the Hao River and said [sic] 'Out swim the minnows, so free and easy, that is the happiness of fish', obviously as a result of their nature. The Huainanzi [(sic) says] 'To fail to obtain the Tao is like watching minnows. You can catch a glimpse of this fish, but not catch it'. This fish loves to play in the water, and the Shijing [says] 'In their warrens have many fish, Sturgeons and snout-fish, Long-fish, yellow-jaws, mud-fish and carp,' where qián < dz'jàm < \*dz'jam潜 'plunge/hide under water' [tr. "warrens"] is a loan for Sien < sjen < \*sjen ~ chen < ts'ien < \*ts'ien ø "tall tree" meaning a 'fish trap' where bundles of brush are put into water, and after fish enter it to rest, they are [因] trapped and captured. The Erya [sic] defines  $oldsymbol{\mathcal{U}}$  as a place where fish rest. However this Shijing ode refers to the coldest time of year at the end of Winter before the beginning of Spring, so the fish caught in the warren can be offered for sacrifice; but that was not a season when they would swim about [during hibernation]. Nowadays people call the tilphao <d'ieu A the canyú < ts'amgiso 参照 "three/consult fish," and this pronunciation is close to chen < ts'iem of 'fish trap', or, it could be that the can name derives from its hiding within the Chan 'trap'. This fish's intestines are removed and dried to make canyuxiang 🕏 魚鸌. Another name is the routiáo < rzjukl'ieu 内條 "meat branch" fish.

This descriptive definition has a few errors. The *Zhuangzi* and *Huainanzi* (plus its commentary) are more paraphrased than quoted, cf. the originals in §1.2 and §1.4. There is no way of determining when this *Shijing* poem was written. Since the *Erya* does not define v, this "a place where fish rest" probably refers to the *Jiyun* v "shēn, brushwood put under water in order to catch

fish" definition. Rather than a dubitable 'trap' etymology, this  $c\bar{a}n < ts'an$  M name is more likely a predecessor of  $c\bar{a}ny\acute{u} < ts'anngiwo$  参魚.

The 1615 Zihui 字彙 [Logograph Classification/Glossary], compiled by Mei Yingzuo (1553-1619), defines 33,179 logographs. It is best known for inaugurating what became the standard 214 radical system replacing the original 540 in the Shuowen jiezi. The 214 are ordered by their number of strokes, from one (e.g., -,  $\cdot$ , ...), two (-, +, ...), up through seventeen (+), and logographs arranged under each radical by number of residual strokes. Under the + "fish radical," for instance, words written with residual four stroke logographs (e.g., +, +) come before five (+, +) which come before six strokes (+, +), etc. The +0 "fish radical" (no. 195, between +1 "high; tall" and +3 "bird") section defines 489 logographs, including,

B or  $\triangle$ , you  $\leftarrow$  igu pronounced like you  $\leftarrow$  igu  $\boxplus$  [the phonetic in H], a fish name, also  $ti\acute{a}o \leftarrow d'ieu$ , pronounced like and cognate with  $ti\acute{a}o \leftarrow d'ieu$   $\cong$  'distant', also  $c\acute{h}ou \leftarrow$   $\acute{z}i\acute{g}u$  pronounced like  $c\acute{h}ou \leftarrow \acute{z}i\acute{g}u$ , a personal name, the zuozhuan [Xi 23] "took Ji Wei to himself as his wife, and she bore him Bo Chou', also Liu Chou [d. 168] of the Latter Han.

A,  $ti\acute{ao} < d'ieu$ , pronounced like  $ti\acute{ao} < d'ieu$ , the white  $ti\acute{ao}$ , its shape is narrow and long like a branch, its nature is playful, and it resembles the  $\alpha$  'yellow croaker' [mentioned in] the Shijing (Zhou Song) 'Long-fish, yellow-jaws, mud-fish and carp'.

Note the glossing of pronunciation with both a technical fănqiè and a more readily understandable homopohone (cf. Guangyun yùnmù rhyme headings), here  $ti\acute{ao}$  迢 'distant' said to be cognate ('long distance' =? 'long fish') with B but not A. The Zihui cites the Xunzi §1.3 with  $\kappa$  instead of N and the Shuoyuan §1.6 with \*diangkjog 陽衢 instead of 陽橋; and is the first dictionary to include C as a proper name, citing the (ca. 300 B.C.E.) Zuozhuan. 33

The 1670 Zhengzitong 正字通 [Correct Character Understanding] is a revision of the Zihui (Liu 1963:47-49) edited by Zhang Zilie and Liao Wenying. It defines 33,440 logographs, 498 of which are written with the fish radical, including tiáo variants A and B:

A, pronounced *tiáo*, the white-*tiáo* has a long narrow shape like a branch. *Shijing* (Zhou Song) "Long-fish, yellow-jaws, mud-fish and carp," Mao's commentary "the white-*tiáo*." Originally written B.

B, pronounced you a small white fish, commonly called can M, also called cantiacyú \$

<sup>33.</sup> The Zihui is the first dictionary to define  $\kappa$ , "qiáo < kiàu, pronounced qiáo < kiàu  $\approx$ , a fish name." This  $\approx$  is the phonetic in P, defined in the Zihui as "jiáo < kieu:, a white fish, ..." quoting the Shuoyuan story but not the text. In addition, the  $\theta$  " $\delta = 0$  < puât, fish jumping" definition notes  $\theta = 0$  as "a fish name."

條魚. The name for this small elongated fish derives from its nature of occasionally liking to swim and frolic on the water's surface. Zhuangzi "Gazing from the bridge on the Hao [River] the minnows seem happy because they swim out, so free and easy." Huainanzi says "Failing to obtain the Tao is like watching minnows [...] they can be glimpsed, but are very difficult to catch." Also pronounced tiáo in the same meaning. Also pronounced Chóu, a personal name, Zuozhuan "took [Ji] Wei to himself as his wife, and she bore him [Bo Chou]', also Liu Chou of the Latter Han. Also a place name, Zuozhuan (Wen 17) "We will raise all our poor levies, and await you at [You]," commentary "on the border between Jin and Zheng." Also Shanhaijing "The Peng River flows down from Mt. Tai and west into the Pihou River. In it there are many tiso-fish which resemble chickens, have red hair, three tails, six feet, four eyes, and make a sound like a magpie. Eating them will stop melancholy." Guo Pu says, "The tiáo fish has a dry and well-flavored nature, nothing is better for destroying grief and melancholy. The Shijing sings of the XLETCEO 'plant of forgetfulness', the valleys of Mt. Tai have the *LiáO*, by tradition both are taken to bring happiness." However, the *Liá*O in the Pihou has a nearly fantastic appearance, a different species with the same name as the fish in Zhuangzi and Huainanzi. The Pianhai is wrong in taking them to be the same.

These two Zhengzitong definitions copy the Piya's "long narrow shape like a branch" description and "small white fish, commonly called the cān M"; and repeat the Eryayi explanation that "The name for this small, elongated fish derives from its nature of liking to swim and frolic on the water's surface." This B definition rephrases the Zhuangzi (cf. §1.2), mixes the original Huainanzi with Gao's commentary (§1.4), misquotes the Shanhaijing (§1.5), and quotes Guo's Shanhaijing commentary about the "plant of forgetfulness" 'daylily, Hemerocallis fulva' which is likewise said to cure sorrow.<sup>34</sup>

Besides defining A, B and other variants ( $\Delta$ , Z,  $\Theta$ , H, A, K), the Zhengzitong is the first dictionary to identify the Erya's black  $z\bar{\imath}$  I as the  $z\bar{\imath}$  if 'gray mullet, Mugil cephalus' (fig. 16). It defines  $z\bar{\imath}$  I as a fish with:

身員頭扁骨脆子満腹有黄脂類喜食之 a round body, flat head, brittle bones. When its belly is full of eggs, it has yellow fat. Otters like to eat them.

This definition also discusses the black/white inconsistencies of Guo's "white-tiáo 白 A" commentary to the Erya "black-zī 黑 I," and quotes this (1320) Liushugu 六書故 [Reasons for the Six Logographic Categories] definition:

今之鹹淡水中者長不踰尺博身椎首而肥俗謂之 I 海亦有之又有子魚與之相類 c 人鹽藏為苞苴之珍

<sup>34.</sup> The day-lily is called XLEPT董 or Wéngyou 忘憂 'forget sorrow' in Chinese and Wesuregusa 忘れ 草 "plant of forgetfulness in Japanese. While not identified, this quote comes from Guo's Shanhaijing (5/3a) commentary about a creature resembling a bristly raccoon-dog with a white tail that was said to cure sorrow when eaten: the kuku < k'uətk'uət < \*k'wətk'wət mm.

Nowadays the fish commonly called  $Z\overline{I}$  I is found in salt and fresh water, has a length of less than one foot, a wide body, mallet-like head, and is fat; also [a fish] found in the ocean. Also the  $Z\overline{I}$ -fish is a corresponding species which people in Min [Fujian] salt and store as a special food offering.

This southern dialectal name ziyú 子魚 "baby fish" 'zi-fish' could reversibly explain the Guangyun, Jiyun, and subsequent dictionaries defining tiáo with the textually unattested meaning yúzi 魚子 "fish baby" 'roe, spawn'. This Zhengzitong I definition adds the (1596) Bencao gangmu entry for 'gray mullet, Mugil cephalus' which notes the Cantonese term ziyú 子魚 and interprets the name zi 鯔 to mean "black," (cf. this phonetic & the "silk radical" in zi 緇 'black' with the zi 茲 'black' phonetic in I). Li Shizhen notes that the zi 鯔:

is found in the Eastern Sea, shaped like the [black carp], it is more than a foot long, the belly is full of eggs. It has a fine tasting yellow fat. Otters like to eat them. The people of Wu [and Yue, Zhejiang and Jiangsu] consider it excellent food and salt it whole or in slices. (tr. Read 1939:19-20)

From the cognate 'black' phonetic elements in  $z\bar{\imath} < tsieg I$  and  $z\bar{\imath} < tsieg \tilde{\mathbb{M}}$ , it is possible that both named the 'gray mullet', but this interpretation goes against the "white-tiáo" commentary of Guo Pu, a leading fourth century scholar and naturalist. This definition of oceanic *Mugil* could have affected the *Trichiurus* mistake in table 4.

The Kangxi zidian 康熙字典 was compiled from 1710-1716 by Zhang Yushu, Chen Tingjing, et al. under the order of Emperor Kangxi. They based it on the Zihui and Zhengzitong, defining 47,035 logographs plus 1995 variants. The Kangxi zidian remained the standard dictionary up to the present century, and it popularized, or effectively canonized, 35 the 214 radical/stroke system. It quotes făngiè from various dictionaries, notes current [yīn 音] pronunciations, and lists homophonous variants. The "fish radical" (no. 195) defines 572 logographs, including:

B, Tangyun "you < jou" Jiyun "you < jou" Pronounced you Shuowen "a fish name." Jiyun "identical with H." Zhuangzi, Autumn Floods Chapter [ § 1.2] "Out swim the minnows," commentary "white \*d'idg-fish." Huainanzi, Peering Into the Obscure Chapter [ § 1.5] "Failing to obtain the Tao is like watching minnows," commentary "a small fish." Zhengzitong "Commonly called the cántiáoyú 参條無. The name for this long, small fish derives from its nature of liking to swim and frolic on the water's surface." Shanhaijing [§ 1.5] "The Peng River flows down from Mt. Tai and west into the Pihou River. There are

<sup>35.</sup> This dian典 in the title means 'standard (work); canon', and Chinese zidian 字典 or Japanese jiten 字典 'dictionary' became what Xue (1982:157) calls "a name applied to virtually every Chinese dictionary since." See titles in tables 2 and 3.

many \* diôg fish which resemble chickens, have red hair, three tails, six feet, four eyes, and make a sound like a magpie." However, this species is different from the fish in Zhuangzi and Huainanzi [cf. Wang Niansun above]. Also a place name, Zuozhuan (Wen 17) "We will raise all our poor levies, and await you at [Chou]," commentary "on the border between Jin and Zheng." Also a personal name, Zuozhuan (Duke Xuan 3) "I am [Bo Chou]"; and Liu Chou of the Latter Han. Also, Guangyun "Chóu < d'igu " Jiyun and Yunhui "Chóu < d'igu " Zhengyun "Chóu < d'igu " Pronounced like and cognate with Chóu [< d'igu " 'equal; friend']." Jiyun and Zhengyun "tiáo < d'igu " Pronounced tiáo Originally written A, see the A entry.

A, Guangyun "tiáo < d'ieu " Jiyun, Yunhui, and Zhengyun "tiáo < d'ieu " Pronounced tiáo, the white tiáo, a fish name. Zhengzitong "long, narrow shape like a branch." Shijing (Zhou Song) [§1.1] "Long-fish, yellow-jaws, mud-fish and carp," commentary "white \*d'iog." Jiyun "also written B or  $\Delta$ ." Also Jiyun "Xiǎo < Sjāu:, pronounced like and cognate with Xiǎo < Sjāu: /\ 'small, little'."

Owing to the emperor's command that his dictionary be completed in five years, the Kangxi zidian contains errors and misquotes (Fang 1979:224); the (1831) Zidian kaozheng 字典考證 [Dictionary Textual Criticism] corrected over 2500. Taking the B definition as an example: the Huainanzi says "不得其道 To fail to obtain the/its Tao" not [者-nominalized] "不得其道者 Failing [~ One who fails] to obtain the Tao"; part of the Zhengzitong definition is omitted and part reversed to "小而長 small and long" instead of "長而小 long and small"; and the Shanhaijing quote should read "四首 four heads" instead of "四目 four eyes." Even with such minor mistakes, the Kangxi zidian was more inclusive than previous dictionaries, and thus more valuable. For instance, it cites the Zuozhuan using B as a personal and a place name; compare the Zihui mentioning the birth of this Bo Chou/You and the same Liu Chou/You.

Having introduced the classic lexicographical history of tiáo < \*DZIOG A ~ B, we can now compare modern treatments from Chinese, Japanese, and Western language dictionaries in tables 2-4. Since most contemporary dictionaries have familiar formats such as definiendum-definiens rather than exotic aspects such as logographic etymologies or fănqiè glosses, the definitions below are presented in less detail than the early Chinese ones above. Sections 2.2-2.4 discuss general patterns among dictionaries, and instead of translating every tiáo definition, only cite exemplary ones. Note that for typographic reasons, in tables 2-4 modern simplified logographs have been changed to traditional forms, and pronunciations are standardized to Pinyin [tiao, chou, you] without tonal diacritics. Chinese dictionaries use diverse pronunciation systems. Pinyin chóu, for instance, is transcribed as ch'ou or ch'ou² (Wade-Giles), ? X (National Phonetic), chour (National Romanization), yoy (Russian), tch'eo² (Spanish), tch'eo² (French), or 池丸切 (fănqiè).

## 2.2 Modern Chinese Dictionaries

Twenty-four Chinese dictionaries from 1915-1990 are listed in table 2, including some revised editions, but not abridgments.36 Note that this table includes different editions of texts called Ciyuan 辭源 [The Sources<sup>37</sup> of Words] and Cihai 解海 [A Sea of Words]. In parallel to English dictionaries entitled Webster's, the Ciyuan and Cihai have gone through diverse Mainland and Taiwan editions; and from differences among the definitions listed, it is clear these dictionaries were not simply revisions.

### Table 2 - Modern Chinese Definitions

DICTIONARY DEFINITION(S) 【B】[you]魚名.白B.即A魚.詳A字注. 1915 Ciyuan 【A】[tiao]魚名.即白A.詳白A條. 【白A】[baitiao]魚名.産於淡水.大者長尺許.形狭長.背淡黑.微青.腹白 鳞細.好群遊水面.一名三魚.又称三條魚. 【A】[tiao, xiao] ① 魚名.〔詩潛〕—αη鯉.〔笺〕—白—也.〔按即A Zhonghua dazidian 魚.釋魚義疏引以雅云—魚形狭而長.江淮之間謂之M魚.今俗呼白漂.蓋語聲之 蠲耳.〕② 海魚名.屬喉鰊類.體長僅七八寸.背部蒼青.腹部白.脊鰭之後端有 一長刺.延長成絲状.肉供食用. 【白A】[baitiao]魚名.俗呼白Ψ[sic].〔詩・周頌蓍] Aαガ鯉.〔傳〕A〇 Citong 〇也. 〔山海經・北山經郭注〕小魚日A.爾雅翼云其形織長而白.故日〇〇. 【白Γ】[baitiao]〔爾雅・釋魚〕Θ黒Ι.〔郭注〕即〇〇[sic]魚.江東呼 為Θ. 【A】[tiao] ① 白A. ② 三A. Zhonghua guoyu dazidian 【日】[can]【日A】淡水裏的一種小魚兒.

Biaozhun guoyu dacidian

Guoyu cidian

1936 Cihai

1950 Ciyuan

【A】[tiao]白A,魚名.

【A】[tiao]〔動〕魚名,形狭長,大者長尺許.

【A,B,A】[tiao, you, chou]動物名.(Zucco [sic] platypus) 屬魚類喉螈 類,形狭長,側扁而薄,體長數寸至尺餘,下顎比上顎長,尾鰭分叉,鱗細而整齊,背 部淡黑色微带黄,腹部黄白色,肉多細骨,榛河湖池沼間,性好群遊,名見〔本草 網目〕.又有白B,E魚,Θ魚,等名.按今動物學以M為A之較大之一種,長可一 二尺.

【B】[tiao, you, chou]白B魚也,見〔玉篇〕.〔莊子秋水〕:『B魚出游從 容.』 釋文引 [爾雅] 『❷黒Ⅰ』郭注:『即白B也』意謂❷B二字通用.朱駿 聲 [説文通測聲] 云: 『字亦作A今之白餐條也.』 按字又作A.參閱AA二

字注: Guoyin zidian

【A】[tiao]魚名,形狹長,大者長尺許,背部淡黑微黄,腹部黄白色.亦稱白A.

【A】[tiao]魚類喉鰾類.又稱白B.學名 Cultriculus kneri (Hemiculter leucisculus).英名 Keeled culter.形狭長阆扁而薄.其状略似柳葉.頭小.下顎

36. E.g., the 1937 Guoyu cidian and its revised 1981 Chongbian Guoyu cidian are shown but not its abridged 1957 Hanyu cidian revision which copies verbatim the Guoyu cidian definition.

<sup>37.</sup> Instead of 火焰n源 'source (esp. river), fountainhead' the 1978 Ciyuan uses the watery nearsynonym yuān洲 'deep (water), abyss'.

## Michael Carr, "Tiao-Fish through Chinese Dictionaries"

比上颚長.肩部微駝.鰭分叉.鱗細.背部淡黑带黄.腹部黄白色.肉多細骨.棲於河湖沼池間.名見〔本草綱目〕.

- 【B】[you, tiao]白B魚也.見〔玉篇〕.即A魚.詳A字注.
- 【E,A】[tiao] 魚名,身体小,側綫緊貼腹部,生活在淡水中.
- 【A】[tiao]魚名,產于淡水.大者長一尺余,形狹長,背淡黑,微青,腹白鱗細,好群遊水面.一名三魚,又称三A魚。
- 【E】[tiao]魚名,亦称白A.一種性好群遊的小魚,長僅数寸,形狭而扁,状如柳葉,鱗細而整齊,潔白可愛.見《本草網目・魚部三》.《詩・周頌・潛》:"猗與漆沮,潛有多魚,有Ω有鮪,A,α,η,鯉."亦作"B".張華《答何劭》詩:"屬耳听碧鳴,流目玩A魚."
- 【E,A】[tiao]魚類的一層,身体小,側綫緊靠腹部.生活在淡水中.
- 【A】[tiao, xiao] ① 魚名.(Zucco [sic] platypus) 屬魚類喉螺類,形狭長,側扁而薄.體長數寸至尺餘.下顎比上顎長.尾鰭分叉,鱗細而整齊,背部淡黑色带微黄,腹部黄白色.肉多細骨.棲河湖池沼間,性好群遊.又有白B,三魚,Θ魚等名.案今動物學以三為A之較大之一種,長可一二尺.或作B,Δ.〔集韻〕A,白A,魚名,或作B,Δ.〔正字通〕A,白A形狭而長,若條然.〔詩,周頌,潛〕Aαη鯉.〔箋〕A,白A也.〔本草,A魚〕集解,時珍曰,A生江湖中小魚也,長僅數寸,形狭而扁,状如柳葉,鱗細而整,潔白可愛,性善群遊.② 或作Z.〔集韻〕A或从了.
- 【B】[you] ① B魚也.即小白魚.〔説文〕B,B魚也,从魚攸聲.〔爾雅,釋魚, ⊕黒I,注〕即白B魚.〔正字通〕B,小白魚,俗称三魚,亦曰参條魚,小而長時 浮水面,性好遊故名.② 魚卵也.〔集韻〕B,一曰,魚子.③ 地名.春秋,晉鄭 之境.〔左氏,文,十七〕將悉敝賦以待于B〔注〕B,晉鄭之境.
- [chou] ① 魚名. 〔集韻〕 B,説文,魚名. ② 魚卵也. 〔集韻〕 B,一曰,魚子. ③ 魚名. 食之可以忘憂. 與「通. 〔山海經,北山經〕 带山,彭水出焉,其中多「魚,食之可以已憂. 〔注〕 睪 $\pi$ 日,依義當為「,B借音字. ④ 或作 $\Delta$ . 〔集韻〕 B,或書作 $\Delta$ .
- [tiao] ① 白A也.與A同. (集韻) A,白A,魚名,或作B. ② 或作H. (爾雅,釋魚,釋文) B,本亦作H.
- 【B】[chou, you]B魚,也叫「白A」「A魚」或「Θ魚」.參看「A」字.
- 【A】[tiao]A魚.體形狹長,有細鱗,肉内多細骨.
- 【A】[tieo][名]A魚、體形狹長,鱗細而整齊,肉多細骨,棲湖沼中、俗叫「白A魚」。
- 【B】[chou] [名] 白B・・就是白色的三A魚・
- 【E】[tiao][名]魚名,身體狭長而扁,下颚較上顎長,鱗很細但很整齊,背部淡 黑色,腹部黄白色,棲息在河流及池沼間.
- 【A】[tiao]魚名·体形狭長側扁,長數寸到一尺餘,鱗細而整齊,背部淡黑色微带黄,腹部黄白色,肉多細骨,棲於河湖池沼中,性菩群遊,也叫「白魚」,「豆魚」,「⊙魚」等。
- 【E,B】[tiao, you]魚名,亦称白A.《莊子·秋水》:"B魚出游從容."
- 【A,E】[tiao]淡水魚一種,亦名B.
- 【B】[you]A魚.
- 【A】[tiao][名](動物)魚名,屬脊椎動物亜門,硬骨魚網,條鰭亜網,鯉形目,形狭長,側扁而薄,體長數寸至數尺,下颚突出,尾鰭分叉,細鳞,背部黄黑,腹部黄白色,淡水産。
- 【B】[chou, you][名](動物)魚名;又名白A,A魚.
- 【E】[tiao]【EE】魚名.体阑扁,長四五寸,銀白色.生活在淡水中.可供食用.
- 【E】[hemiculeer (sic) leucisculus] 魚名.亦称白E, EE.
- 【E,A】[tiao]《廣韻》徒聊切,平蕭定.又《集韻》先了切.幽部.魚名.又名白 E,EE.魚綱鲤科.体長,側扁,銀白色,側綫緊靠腹部,性活溌,善跳躍,常在水面

Xinhua zidian Sijiao haoma xincidian

1965 Cihai

Xiandai Hanyu cidian Zhongwen dacidian

Guoyu ribao cidian

Cihui

Guoyu tujie cidian

1978 Ciyuan

1979 Cihai Lishi Zhongwen zidian

Chongbian guoyu cidian

Hanyu xiaocidian Yuyan dadian Hanyu dazidian 結群往来,迅速遊動,我国淡水均産.《廣韻·蕭韻》:"A,白A,魚名."《爾雅翼·釋魚》:"A,白A也.其形織長而白,故曰白A,又謂白B."《本草網目·魚部·A魚》:"A,生江湖中,小魚也.長僅數寸,形狭而扁,状如柳葉,鱗細而整,潔白可愛,性善群遊."《詩·周頌·潛》:"潛有多魚,有Ω有鮪,Ααη鯉."鄭玄箋:"A,白A也."清陣維嵩《朝中措·客中維憶》:"紅魚明A映淪ρ,相間倍離離."

- 【B】 《説文》:"B,魚名.从魚,攸聲."
- (一) [tiao, you]《集韻》田聊切,平蕭定.又夷周切.幽部.B魚.即白E,俗名 EE.清段玉裁《説文解字注·魚部》:"白B,即今白M條."《莊子·秋水》: "B魚出游從容,是魚樂也." 唐王維《中山與裴秀才迪書》:"輕B出水,白鴎矯翼."清徐珂《清稗類鈔·動物類》:"白A即B魚.産於淡水,大者長尺許,形狭長,背淡黑微青,腹白鱗細,好群遊水面.一名呂魚,亦称呂條魚."
- (二)[chou]《廣韻》直由切,平尤澄.幽部.
- ① 魚子、《廣韻·尤部》:"B,魚子、"② 古地名、1.古晉鄭之境、《左傳·文公十七年》:"將悉敝賦以待於B." 杜預注:"B,晉鄭之〔境〕." 2.古鷹国邑名,同魚、(在今奉節縣)鄰近、《左傳·文公十六年》:"又與之遇,七遇皆北,唯裨,B,魚人實逐之。"清顧祖禹《讀史方與紀要·四川四·奉節縣》:"《左傳·文十六年》:"楚侵龐,七遇皆北,唯裨,B,魚人實逐之。裨,B二邑,與魚近也。"

Many of these monolingual Chinese definitions give circular cross-references (A = B and B = A) and list alternative appellations. The 1975 Cihui, for example, uses synonyms to define tiáo A as the "tiao fish" tiáoyú A魚 or "white tiao fish" báitiáoyú 白 A魚, and chóu B as the "white chou" báichóu 白 B or a white cāntiáoyú 三 A魚.

Contemporary Chinese dictionaries in table 2 copy, often without citing, classical table 1 descriptions of the tiáo fish, exemplifying "cut and paste" lexicography. Descriptions of this fish's lin 鱗 'scales' are illustrative. 38 The (1596) Bencao gangmu said its "lin xì ér zhěng 鱗細而整 scales are fine and regular." This is cited verbatim in four dictionaries (1936 and 1965 Cihai, 1968 Zhongwen dacidian, 1990 Hanyu dazidian), as well as quoted without attribution in two (1975 Cihui, 1978 Ciyuan). Other dictionaries rephrase to: "鳞細 scales are fine" (1915 and 1950 [saying "see Bencao gangmu"] Ciyuan,

<sup>38.</sup> Another example is dictionaries asserting that this fish especially hao 好 'likes; loves' to you 遊 'swim; ramble; play'. Among classical wordbooks in table 1, this claim first appears when the 1174 Bryayi says Zhuangzi discussed the tiáo because it "好遊水上 likes to play on the water's surface" and repeats "好遊 likes to play." Following the 1596 Bencao gangmu description of the tiáo's "任好遊 character of liking to play/swim in a school," the 1670 Zhengzitong (quoted by the 1716 Kangxi zidian) etymologizes about its "任好遊 character of liking to play." Four larger dictionaries in table 2 (the 1936 and 1965 Cihai, Zhongwen dacidian, and Hanyu dazidian), follow the Kangxi zidian tradition of quoting the Bencao gangmu; others repeat "likes to play" without citing the source. Compare "好遊水面 likes to play in a school on the water's surface" (1915 Ciyuan and 1955 Sijiao haoma xincidian) and a "任好诗 character of liking to play in a school" (1978 Ciyuan).

1955 Sijiao haoma xincidian), "有鳞細 has fine scales" (1974 Guoyu ribao cidian), "鳞細 fine scales" (1981 Chongbian guoyu cidian), and "鱗很細但很整齊 scales are very fine and very regular" (1976 Guoyu tujie cidian). Modern dictionaries copy not only from classical dictionaries, but also from contemporary ones. For instance, the 1968 Zhongwen dacidian copies word for word, including "Zucco," the 1938 Cihai A definition.

The last dictionary in table 2, the *Hanyu dazidian* is unequivocably the best reference work on Chinese logographs. It defines approximately 60,000, including these two:

A~E, tiáo Guangyun tiáo < d'ieu level tone Xião < Sieu rhyme section. Also Jiyun Xião < Sièu:, yōu < 'iĕu rhyme section. A fish name. Also named báitiáo, căntiáo Cyprinid class. Long body, flat sides, silver-white color, close lines on the sides near the belly, a lively nature, good at leaping, usually swims about the water surface in a school, fast playful motion. Well-distributed in fresh waters of China. Guangyun (Xião < Sieu rhyme): "Tiáo, the white tiáo, a fish name." Eryayi (Explaining Fish): "Tiáo, the white tiáo Since this fish is long, narrow, and white, it is called báitiáo, also called báiyou" Bencao gangmu (Fish Chapter, tiáo-fish): "A small fish found in the rivers and lakes, only a few inches long, thin and flat, shaped like a willow leaf. The scales are fine, regular and clear-cut of very attractive appearance (pretty). It likes to float around in shoals." Shijing (Zhou Song, Qian): "In their warrens have many fish, Sturgeons and snout-fish, Long-fish, yellow-jaws, mud-fish and carp." Commentary of Zheng Xuan: "Tiáo, the white tiáo" Qing dynasty Chen Weisong Chaozhongcuo (Kezhong zayi): "Red snappers and bright tiáos shine in the falling waves, alternating farther and farther apart."

B, Shuowen: "tiáo, the tiáo-fish, derived from the fish [radical] and a tiáo phonetic."

(1) tiáo (also read yóu) Jiyun tiáo < d'ieu level tone xiāo < sieu rhyme section. Also yóu < iau yōu < 'iœu rhyme section. Tiáo-fish, the white tiáo, commonly named căntiáo Qing dynasty Duan Yucai Shuowenjiezi zhu (Fish Section): "The white tiáo is the white cāntiáo." Zhuangzi (Autumn Floods Chapter): "Out swim the minnows, so free and easy, That's how fish are happy." Tang dynasty Wang Wei Zhongshan yu Pei Xiucai dishu: "The light tiáo go out of the water, the white gull strongly wings away." Qing dynasty Xu Ke Qingbai leichao (Animal Section): "The white tiáo is the tiáo-fish. It lives in fresh water, large ones reach about one foot in length. It has a long narrow shape, its back is pale black and slightly bluegreen, its belly is white with fine scales, and it enjoys playing in schools on the water surface. Also named cān fish, or cāntiáo fish."

(2) Chốu Guangyun Chốu < đ'ịcu level tone yốu < jicu section. You < 'jicu rhyme section.

(1) fish roe. Guangyun (yốu < jicu section): "Chốu fish roe." (2) Ancient place names. 1. Anciently on the border between Jin and Zheng [present day Hebei and Henan]. Zuozhuan (Duke Wen 17): "We will raise all our poor levies, and await you at Chou." Commentary of Du Yu: "Chou, on the border between Jin and Zheng." 2. Ancient city name in Yong, same vicinity as Yu (in present day Fengjie county). Zuozhuan (Duke Wen 16): "Accordingly [Chu] met with

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[Yong], they met seven times and [Yong] always fled north. Only the men of Pi, Chou, and Yu were employed to drive them off." Qing dynasty Gu Zuyu Dushifang yu jiyao (Sichuan, Fengjie county): "Zuozhuan (Wen 16); "Chu invaded Yong, they met seven times and always fled north. Only the men of Pi, Chou, and Yu were employed to drive them off." The cities of Pi and Chou were near Yu."

These definitions are thoroughly informative, citing the same classical dictionaries and texts as other modern monolingual dictionaries, plus additional ones like the famous "nature poet" Wang Wei (699-759) and the *Qingbai leichao*.<sup>39</sup>

Five dictionaries in table 2 transcend Chinese synonyms for the tiáo-fish and metalinguistically define with New Latin ichthyological terminology. The 1950 Ciyuan accurately gives Cultriculus kneri or Hemiculter leucisculus (fig. 9) with English "keeled culter". The 1990 Yuyan dadian spawned a new Hemiculter misspelling: "hemiculeer." Two dictionaries (1936 Cihai and 1968 Zhongwen dacidian) give "Zucco platypus" which is a mistake for the 'common minnow, pale chub, Zacco platypus' (fig. 29). Besides the dictionaries shown in table 2, "Zucco" has been copied in Chinese-Chinese dictionaries both large and small (e.g., Zhengzhong xingyinyi conghe dazidian and Daxue zidian).

The 1936 Cihai, edited by Lu Erkui et al., defines some 13,000 terms, including many modern words and colloquialisms. Zhu (1990:371) praises its "encyclopedic" treatment of plant and animal names, including (sometimes misprinted) Latin terminology. Not only did the Cihai originate this "Zucco" misspelling subsequently copied into Chinese (and even bilingual table 4) texts, but it was the first dictionary to define the tiáo as the Zacco platypus that is customarily called liè A or táohuāyú 桃花魚 "peach flower fish." Dictionaries going back to the sixth century Yupian (table 1) define liè A ("fish radical" & liè K 'whiskers, bristles; dorsal fin' phonetic; i.e., "bristly-finned") as a fish name, but none before the Cihai associate it

<sup>39.</sup> The Qingbai leichao 清稗類勢, a miscellany of Qing dynasty anecdotes and fables, has a color description of tiáo that illustrates dictionary copying. The 1915 Ciyuan and 1955 Sijiao haoma xincidian quote without attribution the Qingbai leichao's phrase 背淡黑微青 "its back is pale black and slightly blue-green." Compare these descriptions: 背部淡黑微黄 (1949 Guoyin zidian), 背部淡黑色 (1976 Guoyu tujie cidian), 背部淡黑色黄 (1950 Ciyuan), 背部淡黑色微带黄 (1936 Cihai, 1978 Ciyuan), 背部淡黑色带微黄 (1968 Zhongwen dacidian), 背部溢青 (1915 Zhonghua dazidian), 背部 黄黑 (1981 Chongbian guoyu cidian).

<sup>40.</sup> Yuyan dadian definitions include helpful English glosses, but not a few are misspelled. On the same page (2:3431) as "hemiculeer" for tiáo, compare "lof a child grow permanent teeth" and "The moon appear from the west at the and of month."

with the tiáo  $A \sim B$ . In the absence of any pre-1936 sources identifying tiáo as Z. platypus, a hypothetical explanation can be set forth. Many scientific identifications in the Cihai derive from Du Yaquan's classic (1922) Dongwuxue dacidian [A Comprehensive Dictionary of Zoological Terms] which did not include tiáo but identified liè  $\Lambda$  as "Zacco (Barilius) platypus" and hécān  $\overline{M}$  M as "Zacco temminkii" (figs. 29 and 30). Since the Cihai did not include either liè or táohuāyú, 11 but did define cān  $M \sim \Xi$  as tiáo, it is conceivable that editors miscopied "Zucco" from the Dongwuxue dacidian's Zacco.

The problem of misprints like "Zucco" is not unique to Oriental dictionaries. The first edition of a dictionary in any language(s) is likely to have misspellings, and Chinese is no exception. The (1934) Citong 辭通, edited by Zhu Qifeng et al., has two tiáo typos: quoting Guo's commentary with white " $\Gamma$ " instead of B, and citing a common name of white zhàn " $\Psi$ " instead of cān  $\Xi$ .<sup>42</sup>

## 2.3 Japanese Dictionaries

The sixteen 1916-1992 bilingual dictionaries in table 3 uniformly identify Chinese  $ti\acute{a}o$  as Japanese  $hae \sim haya$  m 'chub; dace'. 43 Like table 2, this one shows only primary dictionaries, not revisions or abridgments. Note that pronunciation glosses, both Chinese and Sino-Japanese on'yomi readings, are romanized (e.g.,  $ch\bar{o}$  for katakana  $f \exists \dot{\sigma} \sim \dot{\tau} \dot{\sigma}$ ). Three older Chinese-Japanese dictionaries gloss pronunciation in Sino-Japanese:  $ti\acute{a}o > ch\bar{o} \sim jy\bar{o}$ ,  $ch\acute{o}u > ch\bar{o} \sim jyo$ , and  $y\acute{o}u > yu \sim y\bar{u}$ , nine, particularly newer, ones give only the Chinese pronunciations, and four give both.

<sup>41.</sup> However, the Cihai does define fourteen "peach-flower" compounds, e.g., táchuēshuǐ 桃花水 'spring flood/run-off'.

<sup>42.</sup> This zhan is an obscure name (not defined in Citong) that the Hanyu dazidian describes as a soft-boned scaleless fish 7-8 inches long, and called yinging 銀葉 "silver broth" in Min dialect.

<sup>43.</sup> The usual etymology for the hae  $\sim$  haya name is its hayai  $\mathbb{R}^{\backslash \backslash}$  'fast, quick' swimming [cf. dace  $\langle$  dart], or, more imaginatively, its feeding upon hae  $\mathbb{R}$  'flies'. Sakiyama (1988) proposes that since Okinawans and Southwestern Japanese associate hae  $\sim$  hai with the south and southerly winds, it derives from proto-Austronesian \*P27i 'south', cognate with \*P2Ri 'Southern Cross'.

## Table 3 — Japanese Translation Equivalents

DICTIONARY

EQUIVALENT(S)

Shokai Kan-Wa jiten

- 【A】[cho, tiao]はえ(B).
- 【B】[yu, you] [chō, chou] [fō, tiao]はえ、川魚の一・形あゆに似て背淡青黒色,味は淡い・はや,鮠,A, $\Phi$ ,参條魚・

Shinago jiten

【A】[tiao]魚名.ハヤ.

Kan-Wa shindaijiten

- 【A】[chô, jò, shò]はえ(B).正字通「一形狭而長,若條然」.
- 【B】[yu, cho, jo]はえ,はや,川魚の一.形,あゆに似て背淡青黒色,味は淡いはや,鮠,A, $\Phi$ ,参條魚.莊子,秋水「一魚出游」.

Kago daijiten

Saishin Shinago daijiten

- 【A】[tiao]白魚.
- 【A】[tiao]魚ノ名,ハエ,ヤナギハエ,白A二同ジ.
- 【B】[you, chou] ① 三ト同ジク用フ,魚ノ名,ハヤ,アユ白三.(ハエ) 又音 [tiao] ② 人名及地名ニ用フ.

Shinsen Kan-Wa jiten

- 【A】[chò, jō, shò]淡水産の魚.はえ.はや (B・鮠).形は鮎に似て,背は淡青色.
- 【B】[yū, chō, jō]はえ.はや(鮠)、川魚の名・形は鮎に似て背が淡青色,味は鮎よりもまづい・莊子秋水「一魚出游」.

Saishin Kan-Wa jiten Ka-Nichi daijiten

- 【B】[yū, chō, jō]川魚の一,はえ,はや,鮠.
- 【A,B,A】[tiao]〈名〉《魚》喉鰾類の扁平で細長い淡水魚.
- 【B】[tiao]〈名〉《魚》はや,はえ.

Chûgokugo jiten

- 【A】[tiao]〈魚〉はや.
- 【B】[chou]〈魚〉川魚の名,はえ.

Dai Kan-Wa jiten

- 【A】[chò, jò, tiao] [shò, xiao] ① はえ、はや、或はB・Δに作る、〔集韻〕A、白A、魚名、或作B・Δ、〔正字通〕A、白A、形狭而長、若條然、〔詩、周頌、潜〕Aαの鯉、〔箋〕A、白A也、〔本草、A魚〕集解、時珍日、A生江湖中小魚也、長僅數寸、形狭而扁、状如柳葉、鱗細而整、潔白可愛、性善群遊、② 或は2に作る。〔集韻〕A或从了。
- 【B】[yō, yu, you] ① はえ・はや・〔説文〕B,B魚也,从魚攸聲・〔爾雅,釋魚,回黒I,注〕即白B魚・〔正字通〕B,小白魚,俗称三魚,亦曰参條魚,小而長時浮水面,性好遊故名・② はらご・魚の卵・〔集韻〕Bー日,魚子・③ 地名・春秋,晉鄭の境の地・〔左氏,文,十七〕將悉敝賦以待于B〔注〕B,晉鄭之境・[chō, jū, chou] ① はや・〔集韻〕B,説文,魚名・② はらご・〔集韻〕B,一日,魚子・③ 怪魚の名・「に通ず・〔山海經,北山經〕帯山,彭水出焉,其中多「魚食之可以已憂・〔注〕睪π日,依義當為「,B借音字・④ 或は△に作る・〔集韻〕B,或書作△・

[chò, jò, tiao] ① はや.Aに同じ.〔集韻〕 A,白A,魚名,或作B. ② 或はHに作る.〔爾雅,釋魚,釋文〕B,本亦作H.

Gendai Chugokugo jiten Chu-Nichi daijiten

- 【E,A】[tiao](魚) ハエ.ハヤ.
- 【E,A】[tiao] [~魚[yu]] [白~] 《魚介》はや:別称 (B[chou]).
- 【B】[chou, you] [A[tiao]魚] [白[bai]A] ともいう. 《魚》はい[sic] (はや).

Kan-Nichi jiten

- 【A,E】[jō, tiso]白A,はえ.はい[sic](B)淡水魚.
- 【B】[yū, you]白B,はや.はい[sic].

Gakken Kan-Wa daijiten

- 【A】[jō, chō, tiao]〈意味〉(名)はえ 淡水魚の一種.あゆに似て細長い. はや.おいかわ.〈解字〉「魚+音符條(細長い)」の会意兼形声文字.
- 【B】[yu, yù, you] [jō, chō, chou]〈意味〉(名)はや あゆに似た川魚. はえ.おいかわ. 〈解字〉攸は條 (=条.細いすじ)のもとになる字で,細長いの 意を含む.Bは「魚+音符攸」の会意兼形声文字.細長い小魚のこと. 〈字体〉 HはBの異体字.

Kan-Nichi shiten Zhong-Ri cidian

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【E,A,B】[tiao]ハヤ (鮠・A).ハエ (鮠).
【E,A,B】[tiao]【E魚】[tiaoyu]〈魚〉→[cantiao]【三E】
【三E】[cantiao]〈魚〉ハエ.ハ ヤ.→"三魚""E魚"ともいう.
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Every dictionary in table 3 translates Chinese tiáo as Japanese hae ~ haya 'dace; chub', variously written はえ ~ はや in hiragana, ハエ ~ ハヤ in katakana, or  $m \sim \Phi$  in kanji. This m is a Chinese logograph for 'catfish' (discussed below), while Φ (魚 "fish radical" & 若 'young') is a kokuji 国字 'logograph made in Japan'. Owing to dialectal variations typical for Japanese fish names, hae and haya have three different referents44: ugui 石班魚 "stone group fish" 'Japanese dace, Tribolodon hakonensis' (fig. 27), oikawa 追河 "follow river" 'pale chub, common minnow, Zacco platypus' (fig. 29), and kawamutsu 河 ∑ "river bluefish" 'dark/river chub, Zacco temmincki' (fig. 30).45 Their Modern Chinese names are: yǎluóyú 雅羅魚 "elegant net/display fish" 'T. hakonensis', kuāngiliè 寬儲人 "broad fin (~ xiǎokǒu 小口 "small mouth") chub" 'Z. platypus', and danshilièyú 淡氏 A 魚 "Temminck's chub" 'Z. temmincki'. Chinese uses this  $\Lambda$  logograph to write lie 'chub', but Japanese to write karasumi A子 "dried mullet/mackerel roe" (also written phonetically as 唐墨 "Chinese ink"). The practice of writing Japanese hae ~ haya 'chub; dace' as Ĺ led to confusion with Chinese wéi L 'catfish' and resulted in the following dictionary mistake.

Five table 3 dictionaries translating Chinese tiáo A~B as Japanese hae months comparison went from the 1916 Shōkai Kan-Wa jiten through 1930's dictionaries (Kan-Wa shindaijiten, Saishin Shinago daijiten, and Shinsen Kan-Wa jiten) up into the 1978 Gakken Kan-Wa daijiten. 46 However,

<sup>44.</sup> The Dictionary of Japanese Fish Names and their Foreign Equivalents additionally notes hae ~ haya as variants of hayago, hayakko, etc. designations for the medaka 目高 "eye high" 'Asiatic rice fish, Japanese killifish, top-minnow, Oryzias latipes' (fig. 18). Kanegae Nobumitsu's 1960 Chūgokugo jiten artificially distinguishes pronunciations of "tiáo A, haya" versus "chou B, a river fish, hae."

<sup>45.</sup> Two dictionaries give additional equivalents: yanagihae "willow minnow," a dialectal term for kawamutsu (Saishin Shinago daijiten) and oikawa (Gakken Kan-Wa daijiten). This "willow minnow" may result from comparisons with a "willow leaf" (e.g., Ciyuan and Dai Kan-Wa jiten in tables 2 and 3). Cf. English "willow-gudgeon/-minnow" names for Japanese honmoroko 本語子 'rounded shiner, Biwa gudgeon, Gnathopogon elongatus' (fig. 8).

<sup>46.</sup> Furthermore, the Kan-Wa shindaijiten describes the flavor of hae as awai 淡い 'light, plain' and the Shinsen Kan-Wa jiten claims it has more of a mazui まずい 'bad taste' than ayu. The Gakken Kan-Wa daijiten, edited by Tôdô Akiyasu, correctly glosses 貼 as namazu 'catfish;

neither dace nor chub (figs. 13, 27, 29, 30) bear much resemblance to salmonlike sweetfish (fig. 19). This long-copied mistake is owing to Japanese and Chinese using the same logograph to write different fishes. Japanese hae ~ haya 'dace; chub' is written 飾 — graphically identical with yet semantically different from Chinese wéi 飾 'catfish, Leiocassis longirostris' (fig. 12) while Japanese ayu 鮎 'sweetfish' compares to Chinese nián 鮎~鯰 'sheatfish, Silurus asotus' (fig. 24). (Japanese uses this 😫 logograph for namazu 'sheatfish; catfish'.) The Chinese/Japanese 鮎 'sheatfish/sweetfish' dictionary misunderstanding originated in the (ca. 934) Wamyō ruijushō 倭名類 聚抄 [Japanese Names, Classified and Annotated]47 which quoted the *Shisei* ji'en 四聲字苑 [Four Tones Logograph Garden] that "wéi 鮠 catfish resemble nián L sheatfish but are white"; and was not corrected until Kariya Ekisai's 1883 exegesis. His Senchū Wamyō ruijushō 箋注倭名類聚抄 [Wamyō ruijushō with Annotated Commentary] concluded that Chinese nián the 'sheatfish' is equivalent to Japanese namazu 'catfish' rather than ayu 'sweetfish', and traced this confusion back to Guo Pu's commentary on the Erya definition of  $pi \sim p\bar{i}$   $\iota$ (see n. 13) as a large  $hu \sim hu\acute{a} \sim hu\acute{o} \beta$  'catfish, Leiocassis longirostris' that says "hù 'catfish' resemble nián 鮎 'sheatfish', but are larger and white."

1955-1960 Dai Kan-Wa jiten, edited by Morohashi Tetsuji et al., was a watershed in Chinese lexicography. Including variants, it defines 49,964 logographs, including the Kangxi zidian corpus of 47,035 plus subsequent Chinese and Japanese-made kokuji logographs. (It was adapted into the Zhongwen dacidian, cf. table 2). The following translated Dai Kan-Wa jiten A and B entries cite Chinese dictionaries and classics, list two meanings for  $ti\acute{a}o \sim xi\~{a}o$  A and distinguish three  $y\acute{o}u \sim ch\acute{o}u \sim ti\~{a}o$  pronunciations and nine meanings for B:

A,  $ti\acute{a}o$  or  $xi\acute{a}o$  (1) have have also written B or  $\Delta$ . Jiyun "A, the white  $ti\acute{a}o$  A, a fish name, also written B or  $\Delta$ ." Zhengzitong "A, the white  $ti\acute{a}o$  A, with a long narrow

sheatfish' in Chinese and ayu 'sweetfish' in Japanese. This dictionary's exemplary kaiji 解字 "analyzing graphs" section says A and B combine the 魚 "fish radical" with tiáo條~条 "branch" serving both as a phonetic and an ideographic indicator of a 'long thin' fish.

<sup>47.</sup> This early Chinese-Japanese dictionary (Bailey 1960:4-5), edited by Minamoto no Shitago, follows the Eryz semantic tradition and is divided into twenty-four sections/headings (e.g., 18 lists names of Ryugo 龍魚 "Dragons and Fish," i.e., aquatic animals). The entry notes a fargie (Japanese hansetsu) pronunciation of 五灰 wéi < ngai (from the Guangyun, though some editions miscopied with  $\hat{J}U < \hat{K}UU$ : E instead of wǔ < nguo 五) and quotes the (ca. 720?) Kangosho 美語沙 [Annotated Chinese Words] giving a Japanese pronunciation gloss of 波江 hae.

shape like a branch." Shijing (Zhou Song) "Long-fish, yellow-jaws, mud-fish and carp," Commentary "the white \*d'log" Bencao gangmu, tiáo-fish, Explanatory Notes, [Li] Shizhen says, "this is a small fish found in rivers and lakes, only a few inches long, thin and flat, shaped like a willow leaf. The scales are fine, regular and clear-cut of very attractive appearance (pretty). It likes to float around in shoals." (2) also written Z. Jiyun "A, also written with a Lião 7 phonetic."

B, you (1) have have shuowen, "\*d'iog B, the \*d'iog-fish; derived from fish [radical] and tiáo < d'ieu < \*d'iog 嵌 phonetic." Erya, Explaining Fish, "\*dziog ⊕ [means] black \*tsieg 黑I" commentary, "this is the white \*d'iog-fish." Zhengzitong "B, a small white fish, commonly called the can M, also called cantiacyú 珍珠. The name for this small elongated fish derives from its nature of liking to swim and frolic on the water's surface." (2) Fish eggs. Jiyun "B, also said to mean 'fish eggs, roe'." (3) place name. during the Spring and Autumn period, a place on the border between Jin and Zheng. Zuozhuan (Wen 17) "We will raise all our poor levies, and await you at [You]," commentary "on the border between Jin and Zheng"

 $ch\acute{o}u$  (1) hae. Jiyun "B, Shuowen [sic] 'a fish name'." (2) Fish eggs. Jiyun "B, also said to mean 'fish eggs'." (3) name of a mythological fish. Shanhaijing, Northern Mountains [sic] "The Peng River [...] flows from Mt. Tai [...] and in it are many \* $di\acute{o}g$  fish [...] eating them will cure sorrow." Bi Yuan's commentary says, "based upon the meaning, I suggest  $\Gamma$  is a graphic loan for B." (4) also written  $\Delta$ . Jiyun "B, also written  $\Delta$ ."

tiáo (1) haya. same as A. Jiyun "A, white tiáo, a fish name, also written B." (2) also written H. Erya, Explaining Fish, [Jingdian] Shiwen "B, originally written H."

This tiáo A translation of hae ~ haya 'dace; chub' includes the dubious Jiyun "xião" pronunciation gloss < xião /\(\sigma\) 'small [fish]' paronomasia. This complex B entry equates 'dace; chub' and harago (\$500 'fish eggs' for yóu and chóu pronunciations, includes the 'place name' You, graphic variant \(\Delta\), and 'mythical fish name' Chou, and it cross-references tiáo B to A, with a graphic variant H.48

In the last three decades, Japanese dictionaries have added the modern simplified Chinese logograph E, writing the tiáo 條 phonetic 亲 with three less strokes. This E is seen in Kōsaka Jun'ichi's Gendai Chūgokugo jiten, Aichi University's Chū-Nichi daijiten, Fujizuka Shōichi's Kan-Nichi jiten (unusual for being handwritten rather than typeset, n.b. hai "はい" for hae はえ), Kobayashi University's Kan-Nichi shiten, and Shangwu's and Shogakukan's Zhong-Ri cidian.

<sup>48.</sup> One typographical flaw with the Dai Kan-Wa jiten is misquoting. It synopsizes the Shanhaijing quote, but the sections shown with ellipsis marks were correctly added into the abridged 1982 Ko Kan-Wa jiten (not shown in table 3).

### 2.4 Occidental Dictionaries

The choice of seventeen English, Latin, French, German, Spanish, and Russian dictionaries of Chinese in table 4 is less selective than the previous tables, and includes practically every European language source including  $ti\acute{a}o$  A  $\sim$  B. These diverse 1874-1987 bilingual dictionaries range from learners' wordbooks (e.g., Chauncey Goodrich's A Pocket Dictionary, Chinese-English, and Pekingese Syllabary) to specialized historical studies (Axel Schuessler's A Dictionary of Early Zhou Chinese). 49

Table 4 — Western Language Translation Equivalents

DICTIONARY	EQUIVALENT(S)
Syllabic Dict. of the Chinese	[A,B] [tiao] Small white fish, like dace; long narrow fish such as the Trichiurus or Thryssa, called 白   魚; many sorts are common along the coast of China. [M, Ξ] [can] A fish otherwise called A魚 the slender fish, whose description shows that it is another name for the hairtail or girdle fish (Trichiurus armatus
Dictionarium Sinicum et Latinum	and intermedius), so common along the coast.  [A] [tiao] Piscis quidam longus et tenuis.  [B,H] [you] Anguilla.  [chou] Pisciculi nomen.
	[tiao] Piscis longus et tenuis.
Petit dictionnaire chinois-français	【A,△】[tiso] 白   Nom d'un poisson long et mince (詩 周頌).
	(H,B) [you] Espece d'anguille.
	[chou] Nom d'un petit poisson.
Dict. classique de la langue chinoise	【A】[tiao] 白   Nom d'un poisson long et mince (詩周 頌)
	$[B,\Delta]$ (you) Nom d'un poisson mince et long.
	[tiso] Nom d'un petit poisson blanc, long et mince.
Pocket Dict., Chinese-English	[A] [tiso] A small white fish.
Chinese-English Dict.	[A,B] [tiao] A long marrow fish.
	[M, E] [can] A long thin fish (Trichiurus armatus and T. intermedius).
Chinesische-deutsches Wörterbuch	[B] [tiao] langer dünner Fisch (Zucco [sic] platypus).
Mathews' Chinese-English Dict.	[A] [tiso] A long narrow fish.
Mathews Uninese-Bigiish Ditt.	[E] [can] A long narrow fish — Trichiurus armatus.
Diccionario manual chino-castellano	
Diccionalio manual Chino-Castellano	[A] [tiao] locha.
Comments Coming Decision	(B) [chou] gobio.
Grammata Serica Recensa	[A] [tiao] a kind of small white fish (Shi[jing]).
	$[\Delta]$ [tiao] a kind of small white fish ([Zhuangzi]).
	•

<sup>49.</sup> Schuessler's historical dictionary, Couvreur's Petit dictionnaire chinois-français and Dictionnaire classique de la langue chinoise, and Karlgren's Grammata Serica Recensa cite the Shijing.

# Michael Carr, "Tiao-Fish through Chinese Dictionaries"

[A] [tiao] in [cantiao]. Beginner's Chinese-English Dict. ...  $[M\Xi]$  [cantiao] Trichiurus armatus (long narrow fish). [A] [tiao] A long narrow fish. Foursquare Dict. ... [B] [chou, you] A long narrow fish — The white Trichiurus armatus. [B] [chou, timo, you] N. A long, slender white fish, Lin Yutang's Chinese-English Dict. ... Zucco [sic] platypus (also called 白條魚). 【B】[tiao, chou] елец, чебак (Leuciscus Hua-E dacidian macropus, рыба). [E,A] [tiao Bound-form: tiao-yu] Zucco [sic] platypus. Chinese to English Dict. small fresh water fish. Liushi Han-Ying cidian [A][tiao] (n.) A long narrow fish. 【A魚】Minnow, a long narrow fish (Zoo.). Dict. of Early Zhou Chinese [A] [tiao] A kind of small fish: Zucco [sic] platypus (Shi[jing]).

Five of the eleven Chinese-English dictionaries in table 4 mistakenly identify the fresh-water báitiáoyú 白 A 魚 or cāntiáo M A Hemiculter leucisculus (fig. 9) as the salt-water "hairtail, cutlassfish, ribbonfish" Trichiurus lepturus/armatus (fig. 28). In Chinese, T. lepturus is called (bái)daiyú 白帯魚 "(white) belt fish" or tàidaoyú 太刀魚 "great sword fish"; not cantiáo. This cantiáo Trichiurus mistake went through three stages. First, Samuel Williams' 1874 Syllabic Dictionary of the Chinese Language accurately translated tiáo  $A \sim B$  as a "Small white fish, like dace," but inaccurately as a "long narrow fish such as the Trichiurus or Thryssa," i.e., the Thrissa genus of anchovies (fig. 25, cf. Coilia and Engraulis, figs. 3 and 6). He repeated this error, along with "common along the coast," under his  $c\bar{a}n \ M \sim \Xi$ equivalent (shown in table 4, cf.  $qi\bar{u} \Theta$  in §3.3). Second, Williams' "long narrow fish such as the Trichiurus or Thryssa" was given seeming veracity through two standard reference works: Herbert Giles' 1912 Chinese-English Dictionary and Robert H. Mathews' 1931 Chinese-English Dictionary. 51 The former translated  $ti\acute{ao}$  A  $\sim$  B as "A long narrow fish" and  $c\~{an}$  M  $\sim$  E as "A long thin fish" copying T. armatus and intermedius cutlassfish but not Thrissa anchovies. Mathews' omitted the two less common variant graphs and translated tiáo A as "A long narrow fish" and cān E as "A long narrow fish —

<sup>51.</sup> Giles' and Mathews' dictionaries, with 13,848 and 7773 logographs, were updated derivations from Williams' and they have been used by several generations of English-speaking students of Chinese.

Trichiurus armatus." Third, T. armatus was repeated by a pair of Chinese-English dictionaries translated from monolingual ones in table 2: W. Simon's 1964 A Beginner's Chinese-English Dictionary of the National Language (Gwoyeu) was based on the Guoyu cidian using Y.R. Chao's National Language romanization, and J.A. Herring's 1969 Foursquare Dictionary In Chinese and English was based on the Sijiao haoma xincidian using Wang Yunwu's Four-corner indexing system. Beginner's cross-referenced tiáo A [spelled "tyau"] to cāntiáo \(\Sigma\) A ["tsantyau"] translated as "Trichiurus armatus (long narrow fish)"; \(^{52}\) and Foursquare gave equivalents of "A long narrow fish" for tiáo A and "A long narrow fish — The white Trichiurus armatus" for chóu \(\sigma\) yóu [sic] B.\(^{53}\) Read (1939:51) corrected Williams' Trichiurus identification, stating: "All other authorities give the hairtail as \(^{\Sigma}\) \(\dag{a}\) iyú."

Like the preceding translations of Trichiurus armatus as a "long narrow fish," four sources in table 4 similarly describe the 'pale chub, Zacco platypus' (fig. 29), but copy its "Zucco" misspelling from table 2. This lexical ghost "Zucco platypus" is reported to be: a "langer dunner Fisch" (Werner Rüdenberg's 1924 Chinesische-deutsches Wörterbuch), "A long, slender white fish" (1972 Lin Yutang's Chinese-English Dictionary of Modern Usage), a "small fresh water fish" (C.K. Wu's 1976 Chinese to English Dictionary), and "A kind of small fish" (Axel Schuessler's 1987 A Dictionary of Early Zhou Chinese).

For most users of Chinese bilingual dictionaries, giving scientific nomenclature like Zacco or Trichiurus is less meaningful than describing a "small" or "long narrow" fish. The 1973 Russian Hua-E dacidian translated both ways: technical L. "macropus"<sup>54</sup> and common "elets елец" 'dace' (L. leuciscus, fig. 13) or "chebak чебак" 'cyprinids, esp. chub, roach, ide, bream'

<sup>52.</sup> Simon's the  $C\overline{a}\Pi$  ("tsan") entry lists three logographs —  $\red{s}$  "to take part in...,"  $\red{s}$  "to eat; meal," and  $\red{M}$  "Trichiurus armatus (= tsantyau)" — and translates nineteen words including "tsantyau Trichiurus armatus (long narrow fish)."

<sup>53.</sup> Under the Four-Corner numbers of 2739(4) and 2723(6), Herring's Foursquare included these English entries and original Chinese definitions of "晚課項,形状狭長,側扁而薄." and "白B...白色的MB魚."

<sup>54.</sup> L. macropus ("long foot," cf. the Macropus genus of kangaroos) is puzzling. The Russian-English Dictionary for Students of Fisheries and Aquatic Biology (1973) lists seventeen species of Leuciscus, but not "macropus."

More dictionaries followed Giles' "long narrow" phrasing than Williams' "small white" (cf. Bernhard Karlgren's 1957 Grammata Serica Recensa blend). The identical "A long narrow fish" phrase is repeated in Mathews', Simon's Beginner's, and Herring's Foursquare dictionaries (discussed above), and finally with "minnow" in Liu Ta-jen's dictionary.

Séraphin Couvreur's (1892) Dictionarium Sinicum et Latinum, ex radicum ordine dispositum citing the Shijing and (1903) Petit dictionnaire chinois-français both translate Chinese tiáo "a long thin/slender fish" and chóu "a (small) fish" versus yóu "(anguilla/conger) eel." He corrected this 'eel' association in his (1904) Dictionnaire classique de la langue chinoise (note its "long" and "thin" ordering variation). Besides Couvreur's 'eel' error, perhaps the least accurate translation is the (1933) Spanish Diccionario manual chino-castellano's locha 'loach' and gobio 'goby'. It is not that Spanish lacks an equivalent for Chinese tiáo: viz. leucisco 'dace; chub; pollard'. This 'loach' error could result from misreading descriptions of H (e.g., n. 16) or confusing the \*d'jôg variant qiú < zigu < \*dzjôg \text{\text{\text{on}}} with the homophonous qiū < ts'jou < \*ts'iog \$\mathbb{m} \pi \mathbb{m} \text{\text{iog}} m \pi \mathbb{m} \text{\text{loach}}, Misgurnus anguillicaudatus' (fig. 15, used with tiáo in \$1.2).

In the present sample of tiáo equivalents, more Western language dictionaries of Chinese use zoological terms than common names: the only English exceptions are Williams' 1874 "dace" (regrettably not copied into later dictionaries) and Liu's 1978 "Minnow." While technical nomenclature carries authoritative specificity, ordinary language has advantages for average dictionary users. Even so, common name translations for culture-specific flora and fauna are not the final solution.

#### 2.5 Summary

The dictionaries in tables 1-4 represent three different traditions of Chinese language lexicography in China, Japan, and Europe. In the first two tables, classic and modern Chinese dictionaries give remarkably similar descriptions of the tiáo A~B fish. Most define it in terms of synonyms (e.g., báitiáo or cāntiáo); but two modern ones give the "Zucco" misspelling for Zacco, and another gives "hemiculeer" for Hemiculter. Chinese-Japanese dictionaries in the third consistently equate tiáo with Japanese hae ~ haya 'chub; dace'; however, a few graphically confuse Chinese wéi m' sheatfish' and say tiáo resembles Japanese ayu m' sweetfish' rather than Chinese nián m' sheatfish'. In the fourth table, bilingual European language dictionaries of Chinese give diverse translation equivalents to tiáo. Many describe a "small,"

"long," "narrow," or "white" fish; some repeat the "Zucco" error; and others blindly identify the "cutlassfish, hairtail, Trichiurus armatus."

One general improvement in recent Chinese dictionaries is defining/translating words rather than logographs. To cite Kennedy's "butterfly case" against the monosyllabic myth. In a binomial Chinese word such as húdie 蝴蝶 'butterfly', since neither hú or die nor 蝴 or 蝶 has any independent use, they lack definable meaning. Nevertheless, many dictionaries gloss hú 蝴 and die 螺 as "butterfly" and give húdie 蝴蝶 as a run-on example. Kennedy (1953:86) criticized how this "western practice of inventing imaginary definitions has had a most unfortunate effect on the scientific study of Chinese." This timeworn tradition of dictionaries dealing with Chinese logographs — representing morphemes, word-building elements — rather than words (Mair 1991:84-85) is finally being rectified. Monosyllabic \*DZIOG is attested as an ancient fish name (Shijing), however from an early period it was "-fish" suffixed (Zhuangzi). In modern usage, tiáo is restricted to polysyllabic bound-forms such as tiáoyú A魚, báitiáo(yú) 白A(魚), or cāntiáo  $MA \sim \Xi B$ ; and to claim that the logograph A is a fish name is absurd. Some contemporary dictionaries (e.g., 1978 Liushi Han-Ying cidian) list bound-forms like tiáoyú under tiáo entries, others (1992 Zhong-Ri cidian) cross-reference tiáo to cantiáo.

Modern Chinese dictionaries that use ichthyological terminology for the tiáo identify it as four different fish:

- 1) keeled/dace-like culter, Hemiculter leucisculus (Cultriculus kneri),
- 2) pale chub, Zacco platypus (Leuciscus platypus),
- 3) dace, Leuciscus leuciscus,
- 4) cutlassfish, Trichiurus lepturus/armatus.

The distribution of these four identifications varies. Hemiculter, while consistently preferred in scientific dictionaries (e.g., La-Han jizhui dongwu mingcheng, Zhengzhong dongwuxue cidian), is given in one table 2 Chinese-Chinese dictionary, or two, counting the "hemiculeer" approximation. Zacco is misspelled "Zucco" in several monolingual and Chinese-English dictionaries in tables 2 and 4, Leuciscus in one Chinese-Russian dictionary in table 4, and Trichiurus in several Chinese-English dictionaries in table 4. Table 2 Chinese-Japanese dictionaries give hae ~ haya, i.e., 2) 'chub' and 3) 'dace'.

1) Hemiculter leucisculus (Basilewski 1855) or Cultriculus kneri (Warpachowski 1887) is shown in figure 9. Chu (1930:331-2) lists variant appellations proposed for this fish including Culter leucisculus (Basilewski 1855, Kner 1867); Chanodichthys leucisculus (Günther 1868) changed to

Hemiculter leucisculus (Günther 1873); Cultriculus kneri (Warpachowski 1887 who gave Hemiculter kneri to rename Culter leucisculus Kner); and Hemiculter clupeoides (< "herring" Nichols 1925). This Cultriculus (Oshima 1919) or Hemiculter (Bleeker 1859) genus of fishes with a keeled abdominal edge was originally classified under Culter (< Latin culter 'knife; plowshare'). The uniquely Chinese culters, roughly corresponding to European bleaks (Alburnus) or Russian skygazers (Erythroculter), are comparatively large fish with narrow bodies and upturned mouths, living in streams and rivers throughout China. Lorden says:

The correct name for it is the *Hemiculter leucisculus*, but, as such a name can never be popular with anglers, this fish is usually known amongst us as the knife fish, which is a literal translation of the Chinese name. (1924:135)

While Latin culter means 'knife', Chinese dāoyú 刀魚 "knife fish" (~ dāojìyú 刀 魚魚) commonly names 'anchovy, Coilia nasus' (fig. 3).56 Sowerby (1925:80-1) lists Chinese culters to include "bleak-like culter" C. alburnus (fig. 4), "red-finned culter" C. crypthropterus, "sharp-headed culter" C. oxycephalus, "Mongolian culter" C. mongolicus, and, the tiáo, "dace-like culter" Hemiculter leucisculus. He differentiates:

The hemiculters are bleak-like fish in which the dorsal outline is inclined to be a good deal straighter than the ventral, the mouth being oblique with a tendency toward the vertical. They are at once distinguishable from the culters, which they resemble, in the much fewer rays in the anal fin, and the larger scales. (Sowerby 1930:98)

Since hemiculters are virtually unknown outside of China, there is a foreign lexical gap for a non-scientific name. Proposed English names for Cultriculus kneri include "dace-like culter" (Sowerby), "keeled culter" (1950 Ciyuan), or "common sawbelly" (Nikol'skii 1982:270; however sawbelly refers to 'gizzard shad, Dorosoma cepedianum' or 'alewife, Pomolobus pseudoharengus').

2) The "pale chub" or "common minnow" (fig. 29) has been designated Leuciscus platypus (Temminck and Schlegel 1847), Zacco asperus (Nichols and Pope 1902), or Zacco platypus (Jordan and Evermann 1902). Leuciscus, like leucisculus, derives < Greek leukos 'white', cf. asperus < aspros 'white' and platypus < Greek platupous 'flat-footed'. There has been some confusion among the generic names (Nichols 1928:18-20), and Tribolodon was also called Leuciscus (Günther and Cuvier 1817, who identified Idus waleckii as Leuciscus

<sup>55.</sup> Nichols (1928:26-7) lists four *Hemiculter* species besides *leucisculus*: *H. bleekeri* (Warpachowski, 1887), Mongolian *H. warpachowskii* (Nickolsky, 1903), *H. lucidius* (Pybowsky, 1872), and black-tailed *H. nigromarginis* (Wu, 1964).

<sup>56.</sup> Perhaps Lorden was referring to a Shanghai (Wu) dialect term. English knife-fish likewise refers to several fishes, esp. Gymnotus carapo and Cyprinus cultratus.

waleckii), Leuciscus or Barilius (Temminck and Schlegel 1847), and eventually Zacco (Jordan and Evermann 1902).<sup>57</sup> Z. platypus is closely related (cf. figs. 29 and 30) with the dark/river chub, Z. temmincki (Temminck and Schlegel). Sowerby eloquently describes the tiáo:

the little *I. platypus* is one of the most beautiful of all the fish that occur in those regions. During the breeding seasons it assumes a livery of brilliant blue, pale green, and the most delicate rose pink, its fins being marked in places with crimson. The green and pink occur on the sides, tongues and each colour running into the parts occupied by the other. The head is black, and is covered in the male during the breeding season with peculiar bony tubercles arranged in rows. (1925:81-2)

The 'pale chub, Z. platypus' is consistent with the  $\boxminus$  "white" descriptions and synonyms, but  $lie \land$  'Z. platypus' is nowhere identified as  $ti\acute{a}o \land \sim B$ .

- 3) The common dace Leuciscus leuciscus is shown in figure 13. While Chinese dace are typically yǎluóyú 雅羅魚 L. waleekii, the Russian Hua-E dacidian gives L. "macropus" along with elets 'dace' and chebak 'cyprinids'. Numerous Chinese-Japanese dictionaries (table 3) confirm meanings 2) and 3) with the translation equivalent hae ~ haya meaning: ugui 'Japanese dace, Tribolodon hakonensis' (fig. 27), oikawa 'pale chub, common minnow, Z. platypus', or kawamutsu 'dark/river chub, Z. temmincki' (above).
- 4) The "hairtail" or "cutlassfish" Trichiurus lepturus/armatus (fig. 28) is mistakenly given for the tiáo in five table 4 Chinese-English dictionaries. Cāntiáo MA is a well-attributed synonym of tiáo 'H. leucisculus'; compare the Piya and Zhengzitong in table 1 with the 1938 Cihai, Zhonghua Guoyu dazidian, Sijiao haoma xincidian, and Cihui in table 2. However, it is not the daiyú 带魚 "belt/ribbon/tape fish" T. armatus which is considerably longer and thinner than hemiculter, dace, or chub. This confusion goes back to Williams' dictionary guessing the tiáo is a "long narrow fish such as the Trichiurus or Thryssa."

In any case, the \*DZIOG was a small cyprinid; hemiculters, daces, and chubs are all members of the carp family Cyprinidae. English dace and chub loosely name many cyprinids: the 'European dace, Leuciscus leuciscus (fig. 13) and the 'European chub, L. cephalus' are closely related, 58 and in the United

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<sup>57.</sup> In addition, Boulenger and Günther confused the Leuciscus species with the "notch-jaws" Opsariichthys (Bleeker 1863). Chinese cyprinids of the genera Opsariichthys and Zacco are closely related. The "piscivorous chubs" Opsariichthys are called "notch-jaws" owing to a peculiar mandible shape (see fig. 17).

<sup>58.</sup> Common European Leuciscus species include chub L. cephalus, dace L. vulgaris, minnow L. phoxinus, bleak L. alburnus, ide L. idus, rudd L. erythrophthalmus, and roach L. rutilus.

States, the "creek chub" Semotilus atromaculatus is commonly called the "horned dace."

#### 3 CONCLUSIONS

The data accumulated within this study can first answer specific "What fish?" and "Why happiness?" questions, and then provide some general insights into Chinese lexicography.

## 3.1 What Fish?

Answering "What fish<sup>59</sup> was the \*DZIOG A  $\sim$  B?" requires correlating the three identifications from modern dictionaries [ignoring the mistaken cutlassfish (*Trichiurus*)] of dace-like culter (*Hemiculter/Cultriculus*), chub, (*Zacco/Leuciscus*), and dace (*Leuciscus*) with information from two historical strata: habitats specified in classics dating from the seventh to first centuries B.C.E., and descriptions in commentaries beginning around the second century C.E.

The oldest data about the  $ti\acute{ao} < d'ieu < *d'i\^og$ -fish in question are rivers named in loci classici that elucidate its original habitat. The Qi and Zhu mentioned in the Shijing are tributaries of the Wei that join in Shaanxi. The Hao River along which Zhuangzi and Huizi strolled flows from Anhui into the Huai (of Huainanzi) River. The Peng River in which the Shanhaijing locates  $\Gamma \not\equiv \text{bird-fish flows from Henan into the Zhi River.}$  Several early dictionaries and commentaries mention the Yangtze. These geographic locations show that the \*DZIOG was a fresh-water fish common throughout central China (v. Hanyu dazidian in table 2). Hemiculter, dace, and chub fit this description.

Classical commentaries and early dictionaries give descriptions of the \*DZIOG. Zheng Xuan \$1.1 calls it the  $\boxminus$ A "white  $*d'i\hat{o}g$ ," and Guo Xiang \$1.2 identifies B魚 as a 白魚 "white fish," both of which are consistent with hemiculter, dace, or pale chub. Chinese  $b\acute{a}i$   $\dot{\boxminus}$  'white; clear' can mean 'silver', for instance, the  $b\acute{a}ili\acute{a}n$   $\dot{\Lsh}\gamma$  'silver bighead, Hypophthalmichthys molitrix' (fig. 10). During breeding season, chub take on a distinctive

<sup>59.</sup> Perhaps the question should be what fishes, rather than fish, the \*DZIOG was because it designated more than one aquatic animal. Duan Yucai § 2.1 says the mythical \* $\partial i \partial k \partial i O \Gamma$  birdfish was different from the \* $d'i \partial g A \sim B$ . Two fishes could explain the variant names, with one called \* $d'i \partial g$  and the other \* $\partial z \partial g$  or \* $\partial z \partial g \partial g$ 

yellowish tint, while dace remain silvery. Gao Yu \$1.4 describes the 「魚 as being "very difficult to catch" and the Encyclopedia Britannica (1988, 3:840) says the dace is "a shy, somewhat difficult fish to capture." Yet in complete contrast to what Gao and the Eryayi say about the hard task of catching a \*d'iôg, Liu Xiang \$1.6 writes it is especially easy to catch a \*diang'iog.

Comparisons between tiáo and other fish are a secondary type of data. The Shanhaijing §1.5 says they resemble jìyú 用魚 'anchovies' or zhēnyú 蔵魚 'needlefish' (figs. 3 and 11); and the Piya §2.1 compares tiáo with cháng a 'yellow croaker' (fig. 21). These are all elongated fish, consistent with descriptions of a "long, narrow, white fish," shaped like a "branch" or "leaf." The Bencao gangmu (table 1) has the earliest size notation, and saying tiáo are "only a few [寸] inches long." This clearly rules out the mistaken Trichiurus which average about 150 cm. in length; 'dace; T. lepturus' usually grow up to a length of around 30 cm., H. leucisculus about 15 cm., 'pale chub, Z. platypus' 13 cm., and the 'dark/river chub, Z. temmincki' 20 cm. The evidence suggests, but cannot ascertain, an original referent of Hemiculter or Zacco.60

# 3.2 Why Happiness?

Anyone who has watched a skylark can readily understand the English "happy as a lark" simile, but why did the Chinese \*DZIOG A  $\sim$  B metaphorically signify 'joy; happiness; pleasure'?

Reasons that the \*DZIOG-fish was a metaphor for 'happiness' are more elaborate than its renowned usage in the Zhuangzi epistemological dialogue. The (pre-600 B.C.E.) Shijing is the oldest reference, but it describes the \*DZIOG as sacrificial, not happy. All the other early texts date from the second or first centuries B.C.E.; Zhuangzi twice describes \*DZIOG in relation to happiness, Xunzi says it is playful, Huainanzi alludes to difficulty in catching one, but Shuoyuan says it is easy to catch. The Shanhaijing's mythic anti-depressant \*âjôkŋjo was conceptually associated with the "happy" simile.

<sup>60.</sup> A promising topic for pharmacological study is whether this fish has some anti-depressant properties. In traditional Japanese medicine (Miyadi et al. 1976:141), dried oikawa 追河 'pale chub, Z. platypus' was used to alleviate irascibility in children. This application probably came from the Chinese Bencao gangmu pharmacopoeia that ultimately derived from the mythical Shanhaijing bird-fish, but was it based on pharmacodynamics?

\*DZIOG's etymology classically presents the-chicken-or-the-egg question in historical linguistics. Which came first, a fish descriptively named \*DZIOG "happy; joyous" owing to its behavior, or a \*DZIOG ("branch"?) fish that happened to be pronounced like 'happy' words and was figuratively used in puns? Or, to paraphrase the question in English vocabulary, was the \*DZIOG-fish a happy jack or a happy coat? The happy jack/family name for Australian 'grey-crowned babbler, Struthidea cinerea' describes this bird's talkative and sociable behavior; 61 the happy coat 'a Japanese style jacket' name elliptically derives from happi coat < Japanese happi 法被 '(workman's) livery coat'. Both etymologies are feasible: the \*DZIOG name could derive from a behavioral aspect of minnows, or from a chance coincidence in Old Chinese lexical structure.

On the one hand, happiness is explicable as a characteristic of cyprinid swimming. The Zhuangzi and Xunzi describe the \*DZIOG-fish as "happy" and liking to "play in the sun." In table 1, the Piya says the \*DZIOG has a "playful disposition" and the Eryayi states it "likes to play on the water's surface." Dace and chub flit about the water surface when feeding upon insects (Miyadi et. al 1976:123). Lorden uses the word delightful three times in his essay on fishing for Hemiculter leucisculus; "a delightful and game little fish" that "would have afforded you some delightful hours" (1924:135) and a "delightful fish to keep in ornamental waters" (137).62

On the other hand, a fish called \*DZIOG may have been pronounced like, through language happenstance, Old Chinese 'happy; pleased; cheerful; joyful' allofams (cf. Bauer 1976:8-9) such as:

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ti < d'iei < *djog x 'peace; happiness',
yáo < jaù < *djog 陶 'pleased; happy; merry',
tiǎo < t'ieu < *t'iog 窕 'light, frivolous; furtive',
zhǐ < t'i: < *t'jog 祉 'happiness; prosperity; blessings',
yí < i < *djog 怡 'pleased; cheerful',
yǐ < jāk < *djāk 懌 'pleased; delighted; happy',
xiáng < zjang < *dzjang 祥 'felicitous; auspicious; lucky',
zuò < dz'uo- < *dz'âg 祚 'blessing; prosperity; happiness',
qí < g'ji < *g'jog 祺 'prosperity; fortunate',
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<sup>61.</sup> Cf. the ironic English happy moments name for the poisonous 'black spinefoot/trevally, Siganus spinus'.

<sup>62.</sup> Searching the compact-disk version of the *OED* for "happy" and "fish" synonym co-occurrences reveals (s.v. *dorado*) Stedman's 1796 history of Surinam describes, "dolphins or dorados, which beautiful fish seem to take peculiar delight in sporting around the vessels."

xi < Xji: < \*Xjeg 喜 'happy; delighted; joy; rejoice', hǎo < Xau: < \*Xôg 好 'good; fine; friendly; easy'.

A further aspect was Daoist "happily-floating" wordplay with  $y\acute{o}u < i pu < *d'j\^og 遊 'swim, float; wander, ramble; amusement, leisure': the Zhuangzi term describes Masters Zhuang and Hui "strolling" while debating the *DZIOG-fish happily "swimming." Even though Chinese scholars traditionally etymologized *DZIOG in logographic terms of phonetics (esp. a *d'i\^og 條 'branch'-like shape); a literal *DZIOG 'happiness; joy' wordplay merits further study.$ 

The English lexicon has a similar case with lark meaning both 'a songbird (esp. family Alaudidae)' and 'carefree activity; frolic'. The slang origin of the latter remains uncertain (?< Middle English \*laike(n) < Old Norse lekia), but it may have been affected by the expression happy as a lark referring to this bird's characteristic flight and song. The OED2 lists the first recorded lark 'a bird' from ca. 725 and lark 'frolic' from 1811; with merry/happy/gay as a lark from 1606, 1811, and 1835.

Many languages besides Chinese describe 'happiness; joy; pleasure' in animal terms.<sup>63</sup> Three-fourths of the English *happy* similes listed by Baldwin and Paris (1982:62-3) involve animals:

happy as a clam at high tide,

happy as a pig in a pork pie factory,64

happy as a pig in shit,

happy as a dead pig in the sunshine,

happy as a heifer in a corncrib,

happy as baby beavers in a toothpick factory,

happy as a possum up a gum tree,

happy as a monkey in a monkey tree,

happy as a louse on a dirty head.

Synonymous English 'happy' animal lexicalizations include similes (e.g., "happy/jolly as a thrush," "happy/merry as a cricket," "merry/lively as a grig"), and allusions to animal behaviors ("with tail up," "in high feather," "rosy/red about the gills").

<sup>63.</sup> For German, Lothar von Falkenhausen (p.c. of 1989/6/20) notes similarities with the Schubert song Die Porelle "The Trout" and the ditty "Lebe glücklich, lebe froh, Wie der Mops im Paletot" (Live happy, live glad, like a pug in an overcoat). The Chinese happy fish is roughly analogous with a European and Indic folk tale (Thompson 1955, 6:177) about a laughing fish that reveals an unjust judgment.

<sup>64.</sup> Compare this ironic "happy as a pig in a pork pie factory" phrase meaning 'unhappy' with "happy as ducks in Arizona" and "happy as a bastard on father's day."

Huizi's epistemological argument that "You are not a fish. Whence do you know that the fish are happy?" could apply to English vocabulary for making similar anthropocentric value projections (e.g., "busy as a bee/beaver"65). A possible line of Zhuangzian response would be to point out widespread cultural/linguistic similarities among animal metaphors. 66 For instance, pairs of birds "billing and cooing" are figuratively equated with human lovers. Compare these ornithic likenings for an 'affectionate/happy couple': Chinese yuānyang or Japanese oshidori 鴛鴦 'mandarin ducks', French tourtereaux' (young) turtledoves', and English lovebirds.

## 3.3 Lexicographic Aspects

The  $ti\acute{ao}$  fish provides a historical microcosm of Chinese lexicography because every principal dictionary defines it, and because \*DZIOG's multifarious pronunciations and writings illustrate some unique linguistic problems in Chinese dictionaries.

In this concluding section, four lexicographical topics concerning \*DZIOG will be discussed: (A) translation problems with language-specific words, (B) dangers of misspelling scientific terminology in dictionaries, (C) overdifferentiating modern pronunciations through ignorance of Old Chinese phonology, and (D) overinterpreting graphic etymologies from variant writings of a word. The former two are general dictionary issues; the latter two are peculiar shortcomings in Chinese lexicography. According to Biallas, "the most important reason" for Chinese dictionary insufficiencies

must be sought in the immense material of a culture-language which spreads over several millenniums, which is spoken by the greatest number of men, and which has not yet been completely studied either in its phonetical and graphical, or in its etymological and grammatical content. (1934:183)

Etymologies were mentioned in §3.2, and some phonological and logographic complications in Chinese linguistics are discussed in (C) and (D).

<sup>65.</sup> The euphonies of alliteration and rhyme seem to determine some animal metaphors. In *eager* beaver, for instance, the beaver's "hard-working" association with dam building is biologically owing to its response to the sound (even recorded) of running water.

<sup>66.</sup> Chinese has the reverse of English feel like a fish out of water in the idiom rú yú dé shuǐ 如魚得水 "like a fish gets water" 'be in one's element'.

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(A) Lexicographic problems with how to translate culture-specific words like tiáo-fish are famous (Iannucci 1967, Tomaszczyk 1984, Schnorr 1986, Benson 1990). While Hemiculter leucisculus and Zacco platypus are uniquely Chinese fish, chub and dace varieties are found around the world, and many languages have "minnow" words meaning 'small silvery fishes'.67

How should a dictionary translate the ichthyological identification of the tiáo A~B as a Hemiculter or Zacco cyprinid? A language with a word meaning both 'dace' and 'chub' (e.g., Japanese hae~ haya or Spanish leucisco) allows easier translation than English. Dace (< Old English darse < Old French dars ~ darz < dart) seems preferable to chub or minnow because it cognately describes this fish's typical "darting" motion. Chub (<? Swedish dialectal kubb 'log') sounds like chubby which is inconsistent with a long thin fish. Minnow (< Old English myne 'small fish' <? Greek manos 'sparse') ambiguously names the young of many fishes, especially those used for live bait. English neologisms translating the tiáo & 'branch' in A and B logographs include Williams' "slender fish" and Waley's "long-fish."

Béjoint — quoting Samuel Johnson's flounder definition<sup>69</sup> "The name of a small flat fish" — distinguishes definitions "extracted" from collected contextual meanings versus ones "imposed" by specialists of the domain:

The choice is between vaguer, descriptive, corpus-based definitions written by professional lexicographers, or more precise, prescriptive, corpus-free definitions written by non-lexicographers who are specialists of the domain. (1988:363)

<sup>67.</sup> If translating modern Chinese fish names is hard, then classical ones are even harder. A major problem with Chinese ichthyological terminology is determining diachronic changes over three thousand years. Names of some culturally important fish like the  $\vec{Li} < \vec{Lii} < * \vec{Lieg}$  'carp, Cyprinus carpio' (fig. 5) are consistently definable from the earliest recorded stages of Chinese up to the present; but not some less salient ones like \*DZIOG. Two fish mentioned in the Shijing (57 § 1.1, cf. 204) with \* $d'\hat{LO}$  A provide examples of both historical types:  $Z\bar{LO} < \hat{LO} < * \hat{LO}$ 

<sup>68.</sup> Cf. "mud minnows" (Umbridae) and "egg-laying top minnows" or "killifish" (Cyprinodontidae). In game laws, minnow is sometimes used to contrast with sport/game fish in general.

<sup>69.</sup> This exemplifies what James Murray called "curt" definitions (Bailey 1986:124) in the (1721) Universal Etymological English Dictionary: "Cat, a Creature well known" and "Horse, a Beast well known."

"A long thin fish" is an extracted definition of \*DZIOG and "Zacco platypus" an imposed one. To many people, neither is as meaningful as a dace, chub, or minnow definiens. The advantages of using scientific terminology in general-purpose dictionaries can be lost through misspellings.

(B) The "Zucco" < Zacco hobgoblin illustrates how lexicographers can trust and recopy specious nomenclature. Once a mistaken word has been put into a dictionary, it is often hard to excise it (Carr 1983). Non-specialists are deceived by the seemingly scientific "Zucco platypus" definition seen in tables 2, 4, and 5. This kind of mistake is a common phenomenon among Chinese dictionaries. For example, along with "Zucco platypus," the 1938 Cihai misspells nine "fish radical"-graphs defined with ichthyological terminology:

"Clupea pallasii" for 鯡 Clupea pallasi,

"Hypophtha lmichthys moritrix" for \( \gamma \) Hypophthalmichthys molitrix,

"Hypor hamphus sajori" for X Hyporhamphus sajori,

"Lateo labrax" for M Lateolabrax [japonicus],

"Leptecheneis nancrates" for  $\delta$  Leptecheneis naucrates,

"Misgurus anguillicau datus" for 🗯 Misgurnus anguillicaudatus,

"Sciaena albflora" for & Sciaena albiflora,

"Stromateoides zrgenteus" for & Stromateoides argenteus. 70

The 1968 Zhongwen dazidian copied five of these misspellings ("Crocodilus vularis," "Hypophtha lmichthys moritrix," "Leptecheneis nancrates," "Misgurus anguillicau datus," and "Sciaena albflora"), omitted Latin terminology for two (C. pallasi and S. argenteus), corrected one (to "Lateolabrax"), and changed "Hypor hamphus" to Hyporhamphus but misspelled the sajori species as "sajcri." These lexical ghosts are gradually being exorcised; the revised 1979 Cihai corrects or updates them all. 11 How long will the recently-coined "Hemiculeer" continue to circulate?

<sup>70.</sup> Several of these errors resulted from failure to hyphenate romanized words written sideways within vertical columns of Chinese (yet some entries are properly hyphenated, e.g., this Misgurnus or "Hyporhamphus" in the index). The Zhengzhong xingyinyi conghe dazidian (1971:2160-2195) copies all these mistakes and adds: "Aoipenser mikadoi" for  $\Omega$  Acipenser mikadoi, "Colia nasus" for  $\lambda$  Coilia nasus, "Leuciseus hakuensis" for  $\zeta$  Leuciseus hakuensis/hakonensis, "Oneorhynchus masou" for  $\Omega$  Oncorhynchus masou, "Paralichthys olivaceus" for  $\Omega$  Pseudobagrus aurantiacus, and "Sardinell zunasi" for  $\Omega$  Sardinella zunasi.

<sup>71.</sup> Changing X to (outdated) Hemirhamphus intermedius, cross-referencing  $\delta$  to Echeneis naucrates,  $\mathbf{m}$  to  $\mathbf{m}$  Cobitis taenia, and  $\boldsymbol{\xi}$  to Milchthys miluy; discussing Crocodiliformes under  $\mathbf{m}$ , and adding the japonicus genus for  $\mathbf{m}$  Lateolabrax. The 1979, like the original 1938 edition, additionally rectifies the "Zucco" phantom by defining  $\hat{Lie}\Lambda$  as "Zacco platypus."

Misspellings of biological terms are not confined to Chinese dictionaries, they are lexicographically pandemic. Take, for instance, a "Felix" mistake for the cat genus Felis. Rey and Delasalle (1979:24-5) discuss structural advantages of dictionaries using zoological terminology, and give an example of defining French chat as "felix domesticus" instead of Felis domesticus. The Oxford English Dictionary (1989) defines the loanword colocolo/-la as the "Native name for the wild cat of South America (Felix colocolo)" [sic, cf. Felis pajeros s.v. pampas-cat].

(C) Throughout the two millennia history of Chinese lexicography, as the spoken language was changing and as Old Chinese pronunciations were forgotten, dictionary editors endeavored to explain classical pronunciation glosses. In this century, the ongoing reconstruction of Old Chinese phonology allows us to put word histories into historical perspective.

The fish named \*DZIOG > \*d'iôg ~ \*d'jôg ~ \*djôg illustrates overdifferentiating contemporary pronunciations through unfamiliarity with Old Chinese pronunciations. The Zhuangzi commentary of Guo Xiang (265-317) glosses B pronunciations of tiáo < d'ieu < \*d'iôg, chóu <  $\ddot{a}'$ jøu < \* $\ddot{a}'$ jøu < \* $\ddot{a}'$ jóg, yóu <  $\dot{a}$ jøu < \* $\dot{a}$ jóg, or xião < sieu: < \*siôg. From a short-sighted view, Guo's gloss could be interpreted as four different fish names; or from a longer perspective, all four can be seen as descendants from an Old Chinese \*DZIOG etymon. In Middle Chinese pronunciation seven centuries later, the 1011 Guangyun (table 1) first differentiated \*DZIOG as:

tiáo < d'ieu A 'the white tiao fish', chóu < d'ieu B 'small fish; a fish',

you  $\langle j g u H \sim \Theta \sim \Delta$  'a small fish'.

While Guangyun-era Middle Chinese d'ieu/â'jeu/jeu (or Modern  $ti\'{ao}/ch\'{ou}/y\'{ou}$ ) sounds like a reasonable three-way contrast set for fish names, the 'small white fish' semantics and Old Chinese  $*d'i\^{og} \sim *\^a'jog \sim *dj\^{og}$  phonology instead reveal the same \*DZIOG. The Guangyun's triadic split among \*DZIOG names was copied into the Jiyun, Kangxi zidian, and subsequent dictionaries. Couvreur's Latin and French (table 4) equivalents for Chinese  $ti\'{ao}$  are "a long thin/slender fish" and  $ch\'{ou}$  "a (small) fish" versus  $y\'{ou}$  "(conger) eel."

<sup>72.</sup> Another example is the personal name Bo ("Uncle")  $\triangle B$  in the Zuozhuan. Following the Guangyun distinction, modern dictionaries (e.g., Hanyu dazidian) claim his name was Chou, but we have no way of knowing how it was pronounced 2700 years ago. Legge translates his name as both Chou and You (1872:185, 294).

Dictionaries of Chinese are etymologically disadvantaged in comparison with dictionaries of Indo-European languages like English. Take the Proto-Indo-European root  $*\hat{g}hel-$  'to shine' as an example. Not only historical dictionaries of English, but even "collegiate" ones record this etymon's connections with the series of gl- 'shiny' words like gleam, glimmer, glisten and their cognates gold, glad, gall, yellow, etc. The link between  $*\hat{g}hel-$  and gold sounds comparatively obvious, but the yellow one is almost as obscure as Proto-Chinese \*DZIOG> Modern  $ti\acute{a}o$ ,  $ch\acute{o}u$ , and  $y\acute{o}u$ . Robert Bauer explains:

Sino-Tibetanists may envy the highly polished shine on sound "laws" established for Proto-Indo-European, but such a feeling is tempered with the knowledge that the polishing process spans over 200 years of cumulative efforts. In contrast, the sound correspondences between Proto-Sino-Tibetan and modern Sinitic and Tibeto-Burman languages worked out over a few decades still stand at an early stage of development. (1991:158)

Phonological reconstruction of Old Chinese \*DZIOG relates with the next problem of how to write this ancient fish name.

(D) Graphic variants are a peculiar bugaboo in Chinese lexicography. Logographic alternates take a linguistic step beyond simple synonyms or spelling variants (e.g., Middle English gladd(e) for glad). Throughout the long history of written Chinese, some words have acquired many written forms. Prior to third century B.C.E. Qin and Han dynasty standardizations of Chinese logographs (that is, when fish names began to be regularly written with the "fish radical" 魚), a scribe was free to write the \*DZIOG-fish with practically any graph having a similar Old Chinese pronunciation. The happy \*DZIOG could be transcribed through phonetics (with/or without "fish radical" clarification) like \*diôg 枚 'where' (seen in B,  $\Delta$ , and  $\Gamma$ ); \*diôg 由 'follow; from' (H); or \*dziôg \(\Omega\) 'prisoner' (\(\Omega\)).

For Chinese dictionaries, graphic variants create minor problems like cross-referencing plus the cardinal danger of folk-etymologizing from meanings of phonetic elements. A few phonetics, like the \*d'iôg & 'branch; extended' in A had semantic "branch-fish" significance; but most had primarily phonological value. The eleventh-century lexicographer Lu Dian's dictionary and commentary illustrate the dangers of grapho-etymological speculating. His Piya (see table 1) definition reasonably explains  $ti\acute{ao} < d'ieu$  A to denote "this fish's narrow shape that resembles a long branch" (cf. the less-likely etymologies for ch\acute{ang} a and cān M); but his Erya commentary absurdly claims the  $qi\acute{u} < zigu$  A 'arrest; prisoner; imprisoned' phonetic in  $qi\acute{u} < zigu$  means this fish became "happy" when it escaped from a fish "trap" (mentioned in the Shijing). A more linguistically likely cognate is written with the

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"water radical":  $qi\acute{u} < zi\varrho u < *dziog 泅$  'swim'. Without information about Old Chinese pronunciation, Lu was unable to perceive that both  $*dzi\^og$  囚 and  $*dz\^i\^og$  由 phonetically denoted the \*DZIOG-fish. The graphic variants for a single word are entered into dictionaries, some lexicographers try to differentiate them.

In conclusion, the dictionary ghost  $qiú < zigu < *dziôg \Theta$  provides a good example of the lexicographical difficulties with variant writings. \* $Dziôg \Theta$  first appeared in the 200? B.C.E. Erya and has been copied into Chinese dictionaries ever since. It was glossed as "a fish name" until the 1011 Guangyun distinguished  $\Theta$  between:

似由切白B, qiú < zigu, the white tiáo,

即由切鳥化為魚頂上有細骨如禽毛, jiú < tsigu, a bird that transforms into a fish, with small hair-like bones on its head.

This  $ji\acute{u}$  bird-fish legend probably originated from a physical characteristic of Zacco platypus; Sowerby (1925:82) notes, "The head is black, and is covered in the male during the breeding season with peculiar bony tubercles arranged in rows." About half a century later, Jiyun editors forgot the  $ti\acute{a}o$  fish and defined  $\Theta$  as:

徐由切魚名鳥賊也, qiú < zigu, a fish name, the cuttlefish,

將由切鳥化為魚者頸有骨毛, jiú < tsigu, a bird that transforms into a fish, its neck has bony hairs.

Chinese transformation myths about birds and fish are common (e.g., the Shanhaijing's \*DZIOG "bird-fish" that cured sorrow §1.5), but there is no attestation for the Jiyun defining tiáo or qiú as the wūzéi 烏賊 "crow/black bandit" 'cuttlefish'. 74

Most modern Chinese dictionaries omit  $qi\acute{u}$   $\Theta$  owing to the absence of non-dictionary textual attestation. But the few that do include it continue the Guangyun's arbitrary  $qi\acute{u}$  vs.  $ji\acute{u}$  distinction. Williams' Syllabic Dictionary

<sup>74.</sup> The Bencao gangmu (tr. Read 1939:90) gives three explanations for this w crow/black bandit/pirate" name. Cuttlefish are "metamorphosed from the fish-hawk from which it has retained the beak and belly which it greatly resembles," or from floating on the water surface to lure birds it "is commonly regarded as a dangerous pirate for crows," or "in the ninth moon the winter species of blackbird enters the water and changes into this fish."

<sup>75.</sup> A rare variant name for the 'anchovy, Coilia nasus' may have been a complicating factor:  $Q\hat{I}\hat{U}$ 

#### differentiates $\Theta$ between:

 $[qi\bar{u}]$  Another name for the 白A魚 a long thin fish of the pike family like the *Thryssa*, which delights to gambol on the water; its flesh makes an excellent condiment,

 $[ji\bar{u}]$  A kind of fish with spines on its head, which are supposed to prove that it was transformed from a crested bird.<sup>76</sup>

The Zhongwen dazidian went "hook-line-and-sinker," defining:  $qi\bar{u}$  'white  $ti\acute{ao}$ ' (quoting the Erya), 'cuttlefish' (quoting the Jiyun), or a variant for yóu H (quoting the Yupian); versus  $ji\bar{u}$  'a bird-fish' (quoting the Guangyun). This kind of pseudo-linguistic definition splitting unattested pronunciations is coming to an end. The Hanyu dazidian eliminated the alleged  $ji\bar{u}$  pronunciation but perpetuates the  $qi\bar{u}$  definition as either  $b\acute{a}iti\acute{a}o$  白 B 'pale chub' citing the Erya or  $w\bar{u}z\acute{e}i$  烏賊 'cuttlefish' citing the Jiyun.

This paper angling for one rare fish illustrates the linguistic potentials for combining modern Western science with traditional Chinese scholarship. The current lexicographic renaissance in China has the enviable position of being able to construct dictionaries upon the venerable foundation of Chinese lexicology reinforced by historical and comparative linguistics. Continuing advances in Chinese lexicography hold promise for authorative dictionaries of plant and animal names. A fish named \*DZIOG presents a "happy" example of linguistic change and lexicographical rectification.

 $<sup>&</sup>lt; zigu < *dzi \hat{o}g V$  ("fish radical"  $m = dz \hat{o}g = 0$  phonetic) was first defined in the *Jiyun* along with  $ji\hat{u} < zigu < *dzi \hat{o}g = 0$ .

<sup>76.</sup> Copying Williams, Giles' A Chinese-English Dictionary translates  $\Theta$ : "[ $qi\bar{u}$ ] Another name for the  $\dot{\Box}A$  $\dot{\Box}$  a long thin fish of the pike family, [ $ji\bar{u}$ ] A fish with spines on its head, said to have been transformed from a bird."

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## APPENDIX: SPECIAL LOGOGRAPHS

Γ=儵 0=黴 ν=鮭 0=諼

Δ=無攸 Π=塩 δ=無印 π=沅

E = 鱼条 P = 為 E = 鶏 P = 漪

H= 無由 T= 無取 n= 無 T = 期

Θ = 無囚
T = 無白
θ = 無
υ = 
υ = 
Φ

M = 魚餐 ω = 莊 ω = 茈

# FIGURES

Fig. 1 Acipenser sinensis



Fig. 2 Channa argus

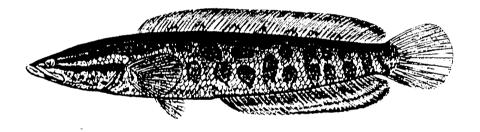
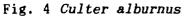


Fig. 3 Coilia nasus





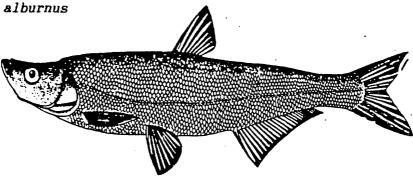


Fig. 5 Cyprinus carpio

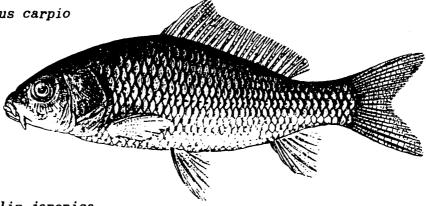


Fig. 6 Engraulis japonica

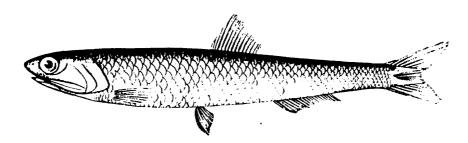


Fig. ? Euthynnus affinis

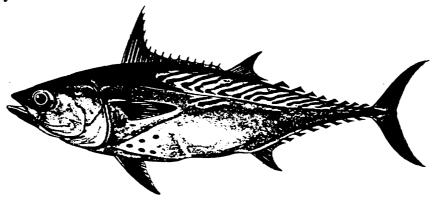


Fig. 8 Gnathopogon elongatus

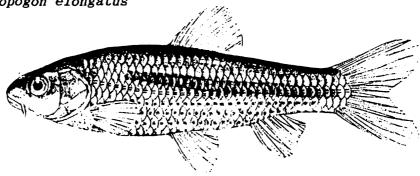


Fig. 9 Hemiculter leucisculus (Cultriculus kneri)

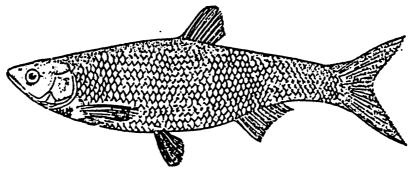


Fig. 10 Hypophthalmichthys molitrix

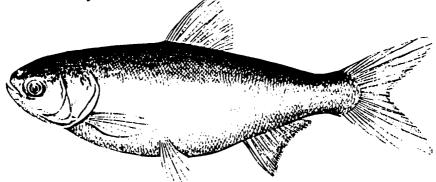


Fig. 11 Hyporhamphus sajori



Fig. 12 Leiocassis longirostris

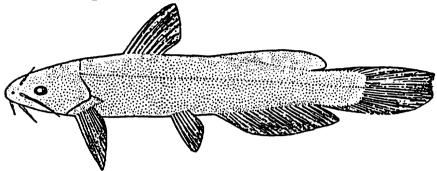


Fig. 13 Leuciscus leuciscus

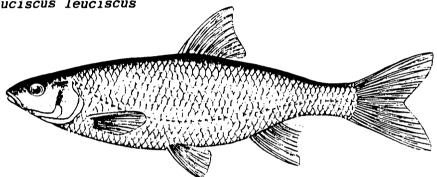


Fig. 14 Megalobrama terminalis

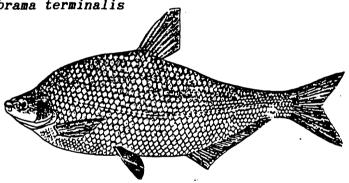


Fig. 15 Misgurnus anguillicaudatus

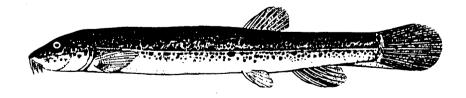


Fig. 16 Mugil cephalus

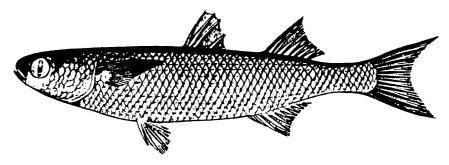


Fig. 17 Opsariichthys uncirostris

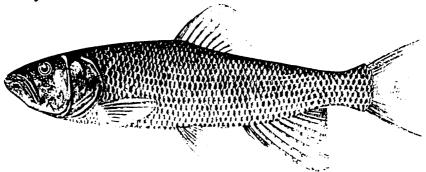


Fig. 18 Oryzias latipes

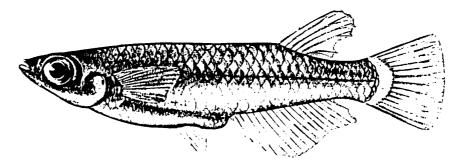


Fig. 19 Plecoglossus altivelis

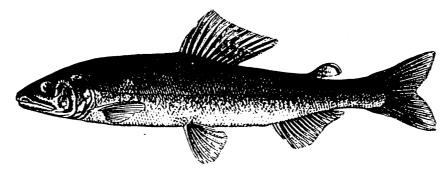


Fig. 20 Psephurus gladius

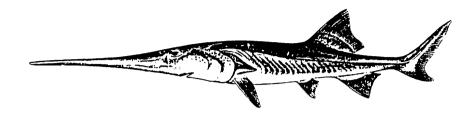


Fig. 21 Pseudobagrus aurantiacus

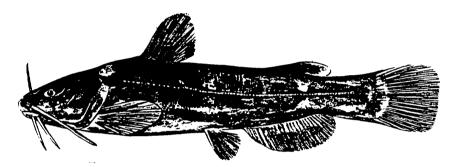


Fig. 22 Salangichthys microdon

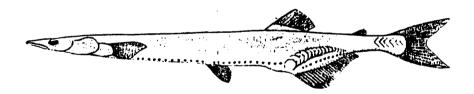


Fig. 23 Scorpaena izensis

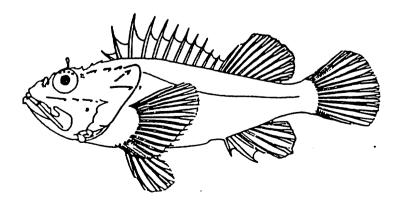
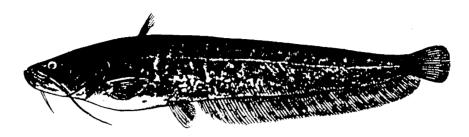
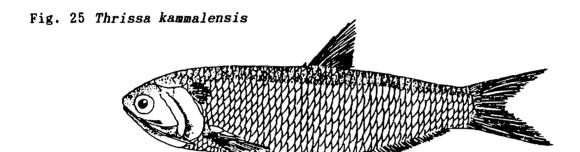
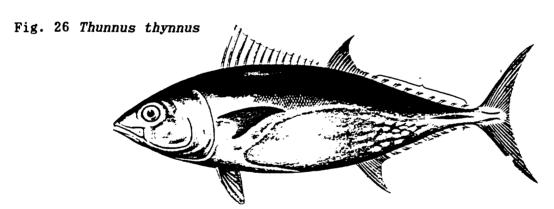


Fig. 24 Silurus asotus









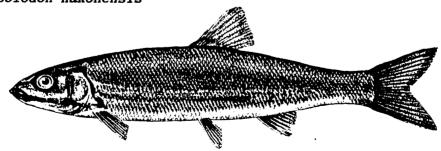


Fig. 28 Trichiurus lepturus

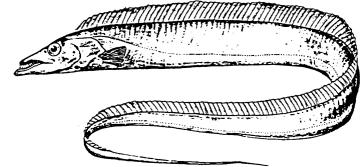


Fig. 29 Zacco platypus

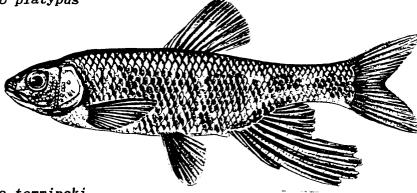
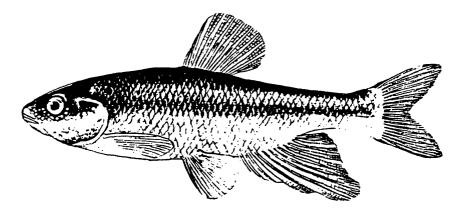


Fig. 30 Zacco temmincki



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