"IT PULLS EVERYTHING TO YOU": NORTH WAKASHAN HERBAL TALISMANS

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ABSTRACT.--Several plant species are known to have been employed as herbal talismans among the North Wakashan groups of British Columbia [Haihais, Haisla (Kitamaat and Kitlope), Heiltsuk, Oweekeno, and Kwakwaka'wakw]. New data reported here involve the talismanic use of fungal and plant species belonging to four genera, <u>Bovista</u> (a fungal genus), <u>Boschniakia</u>, <u>Habenaria</u>, and <u>Pinguicula</u> (flowering plant genera) among the Upper North Wakashan groups (Haihais, Haisla, Heiltsuk, and Oweekeno). In addition, an unusual mid-range Heiltsuk/Oowekyala folk taxon has been identified. This unique plant grouping is defined solely on the basis of psychological, rather than economic, ecological, or morphological attributes.

INTRODUCTION

Biological materials have played a major traditional role in folk beliefs regarding the use of talismans (i.e., those objects or materials to which mysterious or magical qualities are attributed), especially as protective charms and amulets or in sympathetic magic or witchcraft, by Indigenous Peoples of the Pacific Northwest Coast (e.g., Boas 1966:152-155, 163-164, 358, 362-365, 379; Smith 1925:116-121). Minimal previous ethnobotanical research has been conducted among the Upper North Wakashan¹ groups (Haihais, Haisla, Heiltsuk, and Oweekeno) of the Central Coast of British Columbia, therefore the extent to which such beliefs were associated with plant and fungal species by these peoples was, until recently, unknown to outsiders². In addition, secrecy surrounds such matters because even seemingly innocuous

practices such as "love medicine" have long been regarded by coastal Indigenous Peoples as a form of witchcraft (cf. Boas 1966:148-155).

This paper focuses specifically on those plants and fungi to which the most obscure talismanic properties have been attributed by one or more North Wakashan groups, viz. Boschniakia hookeri Walpers. (ground cone; Orobanchaceae, broomrape family); Bovista pila Berk. & Curt. and B. plumbea Pers. (puffballs; Lycoperdaceae, puffball family); Habenaria spp. (bog-orchids; Orchidaceae, orchid family); and Pinguicula vulgaris L. (common butterwort; Lentibulariaceae, bladderwort family). Several other species have reportedly been used among the Kwakwaka'wakw as love charms (Boas 1932b:224-225, 1947:437, 1966:153; Turner & Bell 1973:275, 281-282). These include Aruncus svivester Kostel. (goatsbeard; Rosaceae, rose family), Corallorhiza mertensiana Bong. (western coral-root; Orchidaceae, orchid family), Drosera rotundifolia L. (sundew; Droseraceae, sundew family), and an unidentified species of, perhaps, some type of moss or lichen, said to grow in small bunches on western hemlock (Tsuga heterophylla (Raf.) Sarg.; Pinaceae, pine family) and referred to as KW na'nwalagux"Lawē^{£3} (supernatural tips) (cf. Boas 1940:612). There is no documented evidence that any of the Upper North Wakashan groups used any of these species for such purposes.

Although still other species, e.g., Indian hellebore (<u>Veratrum viride</u> Ait.; Liliaceae, lily family) and devil's-club [<u>Oplopanax horridum</u> (Smith) Miq.; Araliaceae, ginseng family] have been widely considered by Northwest Coast peoples to possess special, even supernatural, characteristics qualifying them for talismanic use (e.g., Boas 1966:379), the full details regarding their use among the Upper North Wakashan groups will be discussed elsewhere.

METHODOLOGY

Upper North Wakashan botanical terminology summarized from Boas (1923, 1925, 1928, 1932a), Lincoln and Rath (1980, 1986), Rath (1981, 1985), Stevenson (n.d.) and documentation produced at the Heiltsuk Cultural Education Centre (Compton 1988a, 1988b) was used in conjunction with comparable Kwak'wala data (Boas 1921, 1932, 1947, 1966; Lincoln and Rath 1980; Turner

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and Bell 1973) as well as data from the neighbouring languages Nuxalk (Bouchard 1975; Smith 1929; Turner 1973) and Tsimshian (Boas 1891, 1912; Dunn 1978) as the basis for elicitation of data in the author's research on Upper North Wakashan ethnobotany represented in part by this report. Data pertaining to North Wakashan herbal talismans were obtained in a review of available recorded materials (Boas 1909, 1921, 1932b, 1947, 1966; Turner & Bell 1973) and through elicitation sessions with speakers of Upper North Wakashan isolects. Interviews with the rapidly diminishing population of Haihais, Haisla, Heiltsuk, and Oweekeno elders knowledgeable of traditional plant names, concepts, and practices were conducted between Summer 1987 and Spring 1990 in Klemtu, Kitamaat Village, Waglisla, Oweekeno Village (i.e., the major contemporary population centres for the Haihais, Haisla, Heiltsuk, and Oweekeno, respectively), Vancouver, and North Delta (a municipality in the Vancouver area) using freshly collected or preserved plant specimens and photographs:

Haihais:

Mary Hopkins (MHo) (1989, Klemtu, B.C.)

Haisla:

Gordon Robertson (GR) (Kitlope; 1988-90, Vancouver and Kitamaat Village, B.C.)

Samson Ross (SR) (Kitamaat; 1989, Kitamaat Village, B.C.) Heiltsuk:

Mary Hunt (MHu) (1989, Waglisla, B.C.; MHu was born at Waglisla but her father was a Haihais from Klemtu)

Pauline Waterfall (PW) (1989, Vancouver, B.C.)

Annie M. Wilson (AW) (1989, Waglisla, B.C.; AW was born at

Waglisla but her father was a Haihais from Klemtu) Oweekeno:

Roy Hanuse, Sr. (RH) (1989, North Delta, B.C.)

Because of the relative inefficacy of formalized elicitation or "ethnoscientific" procedures demonstrated in previous ethnobotanical and folk botanical classificatory studies in the Northwest (e.g., Turner 1974:2, 4, 12-17) and elsewhere (e.g., Felger & Moser 1985:x) as well as in this research, a less formally structured approach to questioning was adopted. For example, Turner, in her attempts to apply a highly structured componential analysis technique in her work on Haida, Nuxalk and Lillooet folk botanical classification, found that response variation was great between consultants as well as among individual consultants from one elicitation session to the next (Turner 1974:14-15). Similar results in the author's work were accompanied by a general disdain among consultants for the concomitant tedium of such elicitation practices (cf. Turner 1974:16). Lively and productive discussion frequently resulted from consultant-directed conversation which generated data that were re-elicited and verified during subsequent, less spontaneous and shorter interviews. In general, data for this paper were, therefore, obtained through informal questioning and discussion regarding traditional plant knowledge and use utilizing Upper North Wakashan terminology with plant and fungal specimens as a means of initiating conversation regarding traditional plant and fungal names, beliefs and uses.

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Plant determinations for specimens collected during this research were provided by the author with subsequent verification by Dr. Jack R. Maze, Dr. W.B. Schofield (UBC Dept. of Botany) or Dr. Scott A. Redhead (Agriculture Canada Biosystematics Research Centre, Ottawa). Voucher specimens have been deposited at the herbarium of The University of British Columbia (UBC). Unless otherwise specified, botanical nomenclature for vascular plants follows that presented by Hitchcock & Cronquist (1973) and for fungi, that presented by Coker & Couch (1928).

Except where noted, the pronunciation and transcription of all Heiltsuk and Oowekyala terms have been reviewed for their accuracy by either Dr. John C. Rath⁴, Evelyn Walkus Windsor⁵, or Dr. Neville J. Lincoln⁶ and all Haisla terms by either Dr. Rath, Dr. Lincoln, or Dr. Emmon Bach⁷. All North Wakashan terms are presented in a form consistent with a system of phonetic orthographic representation developed by Drs. Lincoln and Rath⁸.

RESULTS

Data obtained in this study pertaining to traditional knowledge and use are presented by species, arranged alphabetically in the following section under the categories of Fungi and Angiosperms (Monocots and Dicots).

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Fungi

- (1) <u>Bovista pila</u> Berk. & Curt. and <u>B. plumbea</u> Pers. (puffballs) (Gasteromycetes; Lycoperdaceae, puffball family)
 - HA, GL: k^wak^wk^wsduàýu hs_ńziq ('puffball of ghost," lit., 'smoke (repeatedly/intensively directed)-in the eyes-instrument of/by a ghost'], k^wak^wk^wsduàýu ("puffball")
 - HA, GM: k^wak^wk^wsduàyu ["puffball" (see above)]
 - HE: wádáyú (lit., 'instrument of pulling')
 - HE: mnák uis tútua (lit., 'excrement of star')
 - OO: mnak yis tutua (lit., 'excrement of star;' prompted)
 - Application: good luck charm [Haihais (exemplar), Heiltsuk]; folk belief (Haisla)
 - Portion used: entire carpophore kept on or near person (Haihais, Heiltsuk) Used in conjunction with: used alone (Haihais, Heiltsuk)

Few details regarding native knowledge and use of puffballs (Gasteromycetes, Lycoperdaceae) are known today from coastal cultures of British Columbia. Without citing nomenclatural details, Boas noted the Kwakwaka'wakw use of spores from one or more unspecified species of puffballs (possibly various species of <u>Bovista</u>, <u>Calvatia</u>, and/or <u>Lycoperdon</u>) to encourage the growth of facial hair (Boas 1909:456, 1932b:191) and also as a hemostat (Boas 1932b:189). There is limited evidence of the former use of puffballs as hemostatic agents among other peoples of the Pacific Northwest Coast such as the Nuxalk (Smith 1929:66), Pacheenaht or possibly Ditidaht⁹ (Rollins 1972; Nootka notes, p. 3), Makah (Densmore 1939:316), and Nlaka'pamux (Thompson) (Turner 1990:80) but this was a very common practice among other indigenous North Americans (Burk 1983:58; Vogel 1970:96, 224-225, 235-236). No evidence of such use among the Upper North Wakashan groups is known.

The current research has revealed traditional puffball knowledge and nonmedical use among these groups. Although various folk beliefs are associated with puffballs by these Central Coast peoples, perhaps the only true use of puffballs is of <u>Bovista pila</u> Berk. & Curt. and <u>B. plumbea</u> Pers. for talismanic purposes by the Haihais and Heiltsuk¹⁰. Heiltsuk-speaking elders (MHo, MHu, AW) indicated that puffballs, specifically <u>B. pila</u> and <u>B. plumbea</u>, are regarded as powerful HE ýlítímás, or good luck charms.

One Heiltsuk name for these species, HE wádáyú, literally means 'instrument of pulling,' because of the traditional belief in these species' power to attract various types of good fortune. This term is not restricted in reference to puffballs since it also refers to two Angiosperm species, ground cone (<u>Boschniakia hookeri</u>, #3) and butterwort (<u>Pinguicula vulgaris</u>, #4), to which similar properties are attributed. Of these taxa, <u>Bovista</u> spp. are considered the exemplary types, or "really HE wádáyú" (MHo).

A second Heiltsuk name for puffballs, HE mnák yis tútua (lit., 'excrement of star'), follows from the traditional belief that puffballs are associated with meteors¹¹ (MHu, AW, RH¹²) and is usually invoked only in the context of a discussion of puffball origins. The Nuxalk (Salishan) name, NU maxmik'xlh, is said to have a similar etymology thereby indicating the Nuxalk belief in a celestial origin for puffballs (Bouchard 1975:3, Turner 1973:195). Among the Kitamaat, puffballs were also thought to come from above (SR).

In spite of the benevolent powers attributed to puffballs by Haihais and Heiltsuk consultants, virtually all coastal groups exhibit mycophobic tendencies. Among these peoples puffballs are commonly associated with spirits and/or are believed to be capable of causing moderate to great harm to those who might contact them¹³. Heiltsuk children were warned against touching puffballs for fear that they would not thereafter be loved or get married (cf. <u>Pinguicula vulgaris</u>, #4). Only Heiltsuk adults were allowed to contact or collect them (MHu, AW). Such reluctance towards puffballs as products of meteors may be related to the Kwakwaka'wakw concept of meteors as harbingers of death (Boas 1932b:218).

Among the Haisla, puffballs were regarded as being somewhat dangerous for other reasons. Kitamaat children were warned that puffballs could be injurious (SR) and Kitlope children were warned against playing with puffballs or going out alone after dark for fear that an HA hzid, or ghost, might squeeze a puffball so that the "smoke," or spores would enter their eyes and hurt them or cause blindness¹⁴. A related belief may have existed at one time among the Kwakwaka'wakw who are known to have believed that ghostly exhalations could cause blindness (Boas 1932b:181). Still other Pacific Northwest cultures associated ghosts (Morice 1932:57; L. Gottsfeld, pers. comm. 1988; Turner 1990:80) and blindness (Bouchard & Turner 1976:12) with puffballs.

Puffball concepts similar to those identified among the Heiltsuk are unknown among the Haisla. Further, the Haisla term, "puffball," is strictly limited in reference to true puffball species. Even a closely related species of Lycoperdaceae, viz. <u>Astraeus hygrometricus</u> (Pers.) Morg. (barometer earthstar)¹⁵, which is believed to represent starfish left behind by the great deluge of Kitlope oral tradition, is not regarded as being a type of HA, GL k^wak^wk^wsduàýu hs_hziá. Instead it is uniquely named at the generic level: HA, GL ğazq hs_hug^w]s (lit., 'starfish of the ground') (GR).

Angiosperms (Monocots)

(2) Orchids, various species (Orchidaceae, orchid family)

- HA: xułćnì [√xwł- to come out (said of maggots on, e.g., carrion)] [?<u>Habenaria</u> <u>dilatata</u> (Pursh) Hook., white bog orchid; ?<u>H. saccata</u> Greene, slender bog orchid; ?<u>H. hyperborea</u> (L.) R. Br., northern green bog-orchid or possibly <u>Goodyeara oblongifolia</u> Raf., western rattlesnake-plantain¹⁶]
- KW: L!Eta^{*e}yas¹⁷ [<L!Et(a), "to make love, seduce" (Boas 1921:1437)]
 ["Limnorchis stricta (Lindbl) Rydb." (sic) (Boas 1921:1437; cf. Boas 1932b:240, 1947:437) (syn. <u>H. saccata</u>); ["L. borealis (Cham.) Rydb." (Boas 1921:1437; cf. Boas 1947:437) (syn. <u>H. hyperborea</u>)]
- KW: Llaqwa LlEta^{*E}yas¹⁸ ("red ---") ["<u>Corralorhiza Mertensiana</u> (Boug.)" (sic) (Boas 1921:1437: cf. Boas 1947:437) (svn. <u>C. mertensiana</u> Bong.)]

Application: love charm (Haisla, Kwakwaka'wakw) Portion used: root (Haisla, Kwakwaka'wakw)

Used in conjunction with: used alone (Haisla); sundew, <u>D</u>. rotundifolia (used with H. saccata or <u>C. mertensiana</u> in combination with various non-

botanical materials) (Kwakwaka'wakw; Boas 1966:153; cf. Boas 1921:1395)

As previously mentioned, various species of Orchidaceae were used as love or good luck charms among the Kwakwaka'wakw. For example, Boas reported the use of the roots of northern green bog-orchid (H, hyperborea), whose roots are said to resemble a "couple in embrace" (1932b:225), slender bog-orchid (H. saccata), and western coral-root (C. mertensiana) among the Kwakwaka'wakw in love charms and amulets to bring success in warfare (1932b:224-5: 1947:437: 1966:153). Northern green bog-orchid was also held by lehal players in one cheek for luck (Boas 1932b:240). Haisla consultants have described the use of an as yet unidentified plant, possibly H. dilatata, H. hyperborea or H. saccata, for similar purposes. This plant (tentatively identified by SR as a species of Habenaria from photographs), known as HA xułćni, is said to have white flowers, to grow in swamps, and to have been used among the Kitamaat as a love charm (SR). SR stated that his mother cultivated this plant in order to have it easily available. GR stated that among the Kitlope the sweet-smelling root of this plant was crushed into a paste and used like "perfume" by those wishing to attract members of the opposite sex or to bathe by hunters wishing to mask their human scent¹⁹. For future use the roots of HA xu+cnì were wrapped in moss from trees flikely candidates for which include the mosses Antitrichia curtipendula (Hedw.) Brid., Isothecium stoloniferum Brid., and Neckera douglasii Hook. (W.B. Schofield, pers. comm. 1990)] and enclosed in a clam shell (GR).

Angiosperms (Dicots)

(3) <u>Boschniakia hookeri</u> Walpers. (ground cone) (Orobanchaceae, broomrape family)

HE: wádáyú, wádáyu²⁰ (lit., 'instrument of pulling')

 KW: p!ō'q!ŭs²¹ (?√pwq^w- to break off with the hands) (Boas 1921:1403; cf. Boas 1932b:225, 1947:130 and Turner & Bell 1973:287)

Application: good luck charm

Portion used: cormlike base kept on or near person (Heiltsuk) Used in conjunction with: used alone (Heiltsuk)

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Among the Kwakwaka'wakw, ground cone is said to "pull the man's or woman's heart to the one who wears the charm (nē'xayu²²)" (Boas 1932b:225)²³. Heiltsuk consultants (MHu, AW) believe it, like <u>Bovista</u> spp., to be capable of attracting various types of good fortune and even members of the opposite sex although it is not used specifically as a love charm. If kept in one's pocketbook and taken out periodically and rubbed between the hands, it is said to insure that person's financial wealth. If it is kept in one's cupboard, that person will always have food. Individuals wishing to enjoy the benefits of ground cone have even been known to put it in their bath water (MHu, AW). Talismanic qualities were also attributed to ground cone by the Tlingit who "claim that when it is rubbed on a marten trap when first set in the fall it insures the capture of that animal" (Gorman 1896:78).

- (4) <u>Pinguicula vulgaris</u> L. (common butterwort) (Lentibulariaceae, bladderwort family)
 - HE: ýixýls²⁴ (pl.; sg. ýls, meaning "spread out on the ground"²⁵) OO: wàdayu (lit., 'instrument of pulling')

Application: good luck/love charm (Heiltsuk, Oweekeno) Portion used: entire plant (Heiltsuk); roots or, perhaps, entire plant (Oweekeno)

Used in conjunction with: other materials associated with the one whose attention is desired (Heiltsuk); used alone (Oweekeno)

Butterwort has been used among the Heiltsuk as a special type of HE $y_1^* x_{36}^*$, or "medicine," viz. as a particularly effective HE $w_1^* x_{36}^*$, or "love charm." For this, it was combined with various items belonging to the person whose love is sought (PW). Specifically, it is said to be "medicine to draw a man or a woman, depending on who baths [sic] in it or keeps it in their breast pocket" (Anonymous in Compton 1988a:6). Further, "if it's on the woman, the man goes running after her but if it's on the man, it's the other way around" (Anonymous in Compton 1988b:2). As with puffballs (cf. <u>Bovista</u> spp., #1), MHu and AW stated that this plant was not supposed to be touched by young Heiltsuk girls or they would

never get married (J. Carpenter, pers. comm. 1990). MHu and AW state that the Heiltsuk name for this species is $y_i x y_i s$ but did not refer to it as HE wádáyú. Kwakwaka'wakw men used another unrelated insectivorous bog species, sundew (<u>D. rotundifolia</u>), in the preparation of a love charm, or KW w!x^wayas (Boas 1966:153, 1947:59; Turner & Bell 1973:281). The Haida people of the Queen Charlotte Islands also believe <u>D. rotundifolia</u> to have talismanic qualities. Masset Haida fishermen hang small bunches of it on their seine nets in the belief that they will catch more fish as a result (Turner & Levine 1971:78).

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In Oowekyala, OO wàdayu apparently refers only to butterwort, which is believed to have properties similar to those attributed to puffballs and ground cone by the Haihais and Heiltsuk. RH recalled that his father kept the roots of this plant²⁶ near him when he was gambling. This charm was said to have guaranteed his success. Butterwort was also said by RH to be useful as a love charm.

DISCUSSION

It is clear that the basic concept of botanical talismanic "instruments of pulling" is distributed among the Haihais, Heiltsuk and Oweekeno, and that some of the species employed by these groups were also employed by the Kwakwaka'wakw and Haisla for similar purposes. Such conceptual and, in some cases, linguistic convergence and/or sharing should hardly be surprising considering the cultural and linguistic convergence (cf. Boas 1912:222-225; Nater 1987:1-2; Rath 1981:3-4) or lack of divergence observed among the peoples of the Central Coast .

In addition, the current research has yielded some interesting features of Upper North Wakashan botanical nomenclature and folk botanical classification schemata. These findings have relevance to such studies by demonstrating that culturally imposed biological structure need not coincide with natural biological discontinuities (cf. Hunn 1982:833). This research indicates that native concepts of cultural significance of biological entities contribute to such conceptual structure thereby furthering revisionist folk biological classification arguments (e.g., Hunn 1982).

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In both Heiltsuk and Haisla, unproductive primary lexemes label generic 'instrument of pulling' taxa. Given the linguistic and cultural proximity of the Heiltsuk and Oweekeno (cf. Rath 1981:3) it would be permissible to consider HE wádáyú/OO wàdayu as a triadic class: "puffball/ground cone/butterwort." Therefore, these cognates refer to a folk category which, like Turner's "midrange grouping" (1989:70), is intermediate in its range of inclusiveness with members related by affiliation rather than inclusion. Unlike the "intermediate" category of Berlin, et al. (1973:216), this taxon is not subordinate to any life form class typical of Upper North Wakashan groups (e.g., "tree," "grass," and "moss and moss-like plants").

Although the labels HE wádáyú and OO wàdayu satisfy Berlin's criteria for generic status, they denote three unrelated morphologically and ecologically distinct species²⁷. Unlike other Upper North Wakashan mid-range folk botanical groupings identified in the present research whose members are allied by common physical or economic attributes, HE wádáyú denotes a biologically artificial, monothetic, special purpose class (cf. Berlin, et al. 1966:275 and Hunn 1982:835). Its members are related solely by virtue of their perceived utilitarian²⁸, viz. talismanic, rather than demonstrable qualities. Since its members are not allied by any shared natural attribute clustering (cf. Brown 1984:9, 10) this class lies at the periphery of the natural core of the Heiltsuk/Oweekeno folk botanical domain (see Hunn 1982:835). According to Turner's model (1989:72), this class may be regarded as an unusual type of "generic" complex.

Given the unique range of referents and abstract qualities associated with the term it seems likely that HE wádáyú/OO wàdayu could best be glossed as "good luck/love charm." However, more general terms for such items, i.e., HE ýlálímás/OO ýlálimas ("talisman, lucky charm") and HE wĺx̃waýás/OO wĺx̃wias, wĺx̃wċini²⁹ ("love charm") have been previously attested in Heiltsuk (Rath 1981:310, 656) and Oowekyala (Lincoln and Rath 1980:302; Stevenson n.d.:Y1; cf. Boas 1921:1395). From this it is obvious that, even within Heiltsuk, HE wádáyú serves only to denote the conceptual qualities of its referents as well as its referents themselves, not to distinguish among the species it denotes. How then, if we are to accept the suggestions that folk biological classifications satisfy a human "demand for order" or contribute to survival by enabling their users to better exploit nature and communicate about natural entities (cf. Hays 1988:2-3), shall this enigma be resolved? What adaptationist advantage exists for cultural participants who can adeptly distinguish between different types of herbal talismans but only without resorting to nomenclatural means? Competency in utilizing herbal talismans may well serve specific cultural needs but only those which are independent of those related to survival. Therefore, matters related to survival are not of singular significance to Heiltsuk or Oweekeno folk biological classification. Clearly, the need to attend to both <u>real</u> as well as imagined consequences of folk distinctions among organisms is <u>real</u>, not imagined (cf. Hays 1982:91, 1988:12).

SUMMARY AND CONCLUSIONS

These findings identify many previously undocumented features of Upper North Wakashan ethnobotany as well as a previously unrecognized degree of complexity in the Central Coast native view of certain aspects of their ambient flora. Among Central Coast peoples, puffballs, ground cones, and butterworts are considered to share membership in a unique culturally significant folk biological subgrouping. The identification of this taxon further illustrates the need for ethnobiologists to take heed of the emic perspectives inherent in any folk classification system. As pointed out by Hays, even attention to the utilitarian or survival-based considerations of members of a folk biological category is insufficient for an adequate analysis or understanding of such schemata given the possibility that psychological (e.g., ritual or aesthetic) considerations may form the underpinnings of any particular classificatory construction (1988:14). At least in the limited example of Heiltsuk/Oweekeno 'instruments of pulling,' psychological primacy may be assigned on the basis of perceived similarity or contrast, or functional equivalency or exclusivity, in the native view. Albeit in a limited way, the present research substantiates the claim that in addition to nomenclatural and/or morphological criteria, "utilitarian-based" psychological criteria must be used in the etic delineation of folk biological classes if we are to fully understand the nature of complex. cultural systems such as folk biological classification.

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NOTES

¹To facilitate discussion it is convenient to consider "North Wakashan" as an "ethnolinguistic" label (i.e., having reference to ethnic and linguistic considerations) referring to four neighbouring cultural groups and the isolects they speak (see Nater 1987:1, footnote 2). The use of this label in this context should not be interpreted as an indication of perceived cultural or historical affinities between the peoples discussed in this paper. Instead, it is intended as a method of referring to these groups, which share cultural and linguistic characteristics, in a collective sense in a concise fashion. "Upper North Wakashan" is used in like manner to denote the four northernmost groups: Haihais, Haisla, Heiltsuk, and Oweekeno. Throughout this paper the following abbreviations are used to denote North Wakashan and other ethnolinguistic categories: HA (Haisla, žàňis lakala), HE (Heiltsuk, hí+zaq"la), OO (Oowekyala, wuikala), KW (Kwak'wala, kwak'"ala), CT (Coast Tsimshian, i.e., sm?álg^yʌx; see Dunn 1978:90), and NU (Nuxalk, also known as Bella Coola, nuxalk). Further, the abbreviations "GL" and "GM" are used to denote the recognized dialectal differences within Haisla attributed to Kitlope (CT git 13p, a borrowed term) and Kitamaat people (CT git màat/git ?màat, a borrowed term), respectively, and "BB" and "KL" to denote the dialects of Heiltsuk spoken in Bella Bella [also known as Waglisla (HE wáglísla)] and Klemtu (HE łmdu), respectively. Oowekyala does not exhibit dialectal differentiation.

The Haisla-speaking people are today commonly referred to by the cultural label, "Haisla" (HA xàhisla/xahislá), although, like Boas' misapplied "Kwakiutl" (cf. Boas 1897:328; Rath 1981:4; J. Rath, pers. comm. 1987), this term correctly

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refers to only one of several cultural groups united primarily by what may be regarded as a common language, or isolect, with two dialects. The Haisla comprise the people of Kitamaat Village at the head of Douglas Channel (also known as the Kitamaat people) as well as those known as the Kitlope (see preceding paragraph) or Hanaksiala (HA, GL žnàksiala) people of Gardner Canal (cf. Lopatin 1945:16, Mendel n.d.:18).

As an ethnic term, "Heiltsuk" (HE h1+zaq^w), refers today to the people who are primarily congregated in the Campbell Island community of Waglisla, British Columbia whose ancestral tongue is Heiltsuk and whose ancestry derives from one of four major Heiltsuk-speaking ethnic groups: the 'Uyalitx^w, the Uw1xitx^w, the 'Q^wúq^wayaítx^w, and the 'Isdaítx^w. An ethnically distinct Heiltsuk-speaking group is the Haihais (HE x1x1s) of the Swindle Island community of Klemtu, British Columbia. The Heiltsuk speak what is referred to as the Bella Bella dialect of the Heiltsuk isolect (HE h1+zaq^w1a) while the Haihais speak the Klemtu dialect (HE x1x1ca1a) of Heiltsuk.

A third major Upper North Wakashan ethnic group are the Oweekeno (OO wuikinux") of Oweekeno Village along the Wannock River above Rivers Inlet. Their isolect is referred to as Oowekyala (OO wuikala).

A fourth major ethnolinguistic group comprises, together with the three Upper North Wakashan groups, North Wakashan. This group is referred to as "Kwakwaka'wakw" (KW k^wak^waka^wak^w, lit. 'speakers of Kwak'wala'); a designation which is used today to denote all speakers of Kwak'wala, regardless of specific cultural affiliation (cf. Boas 1897:329). In the past, the term "Kwakiutl" (KW k^wagu¹/k^wagu¹) has been used as both a linguistic and cultural label although, strictly speaking, the Kwakiutl (i.e., the people of Fort Rupert) are but one subgroup of the Kwak'wala-speaking community of northern Vancouver Island and the adjacent mainland (Lincoln & Rath 1986:2; Boas 1897:329-332; 1921:39; J. Powell, pers. comm. 1990).

²This report is part of a broader investigation of Upper North Wakashan ethnobotany and folk botanical classification undertaken by the author as a Ph.D.

candidate in the Department of Botany at The University of British Columbia, Vancouver, British Columbia.

³Using the phonemic inventory developed by Lincoln and Rath (see footnote 9), this term would appear as na:nwalag^w×xawe? [lit., 'supernatural (reduplicated) at end' (plural)] (N. Lincoln, pers. comm. 1990).

⁴Dr. Rath is the former Director of the Heiltsuk Language Program at Waglisla, British Columbia. He assisted the author during field work in Waglisla and Vancouver and provided linguistic and editorial contributions to a preliminary version of this paper. Although Dr. Rath was unable to verify Heiltsuk terms recorded in his absence, he later reviewed and commented upon those terms as recorded by either Evelyn Windsor or the author. Some of the Heiltsuk terms appearing in this paper were converted by Dr. Rath from the "practical" orthography presented in Rath (1981) into phonemic transcriptions.

⁵Mrs. Windsor is an Oweekeno with formal linguistic training as well as personal experience in both Oowekyala and Heiltsuk. She teaches the Heiltsuk isolect in Waglisla, British Columbia. and has contributed to linguistic projects and publications. She assisted the author during field work in Waglisla and reviewed a preliminary version of this paper with MHu and AW. Corrections and additions suggested by Mrs. Windsor, MHu and AW have been incorporated into this paper in its present form.

⁶Dr. Neville J. Lincoln is a professor in the Department of Linguistics, Simon Fraser University, Burnaby, British Columbia. He assisted the author in the transcription of Upper North Wakashan terms in North Delta, British Columbia and provided editorial contributions to a preliminary version of this paper.

⁷Dr. Emmon Bach is a professor in the Department of Linguistics, University of Massachusetts, Amherst. He assisted the author in field work in Kitamaat Village conducted Winter 1989 and provided editorial contributions to a preliminary version of this paper.

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⁸Following is the phonemic inventory used in the transcription of Upper North Wakashan terms: consonants - /b/, /d/, /z/, / λ /, /g/, /g^w/, /g^w/, /g^w/ (plain plosives); /p/, /t/, /c/, /X /, /k/, /k^w /, /q/, /q^w / (aspirated plosives); /p/, /t/, /ċ/, /ʎ/, /k/, /k//, /d//, /d// (glottalized plosives); /s/, /ł/, /x/, /x//, /x//, /x/, /xw/ (fricatives); /m/, /n/, /1/, /u/, /w/, /h/ (plain resonants); /m/. /n/. /1/. /ỷ/, /w/, /h/ (glottalized resonants); /m/, /n/, /1/ ("vocalic resonants"); /m/, /n/, /l/ (glottalized "vocalic resonants"); vowels - /a/, /i/, /u/, /a/ (plain); /i/, /u/, /a/ (glottalized); other elements - /:/ (reduplication boundary), /./ (juncture), /?/ (glottalizing juncture). The symbol """ is used in the representation of several obstruents listed above to indicate liprounding, an articulatory feature characteristic of those obstruents. Accent, when unpredictable, is indicated by use of the grave (`). In the case of the HE isolect the acute () over a vowel or vocalic resonant indicates high tone whereas its absence indicates low tone. Generally, slashes (/.../) are used to indicate a phonemic level of transcription but for the purposes of this paper they will be omitted with the understanding that all Upper North Wakashan terms are in phonemic transcription (unless quoted from an author who did not use such a transcription). Further, all Upper North Wakashan terms are presented in boldface italics [bold-face type] and Latin botanical nomenclature in italics [underlined] as indication that those terms are non-English lexical items. Question marks precede botanical Latin species names where the botanical identity of a species is in question. Single quotation marks are used to denote literal translations of North Wakashan terms. Double quotation marks indicate approximate English glosses. The proclitics /hs. / (HA) and /uis. / (HE/OO), which are incorporated into several Upper North Wakashan plant or fungal names, e.g., HE mnák ujs. tútua (lit., 'excrement of star': Bovista spp.) generally lose their /h/ (HA) or /ui/ (HE/OO) in connected speech in which case the remaining /s/ becomes joined enclitically to the preceding element. These proclitics function among other things, with equivalent of English "of" in, e.g., "City of Rome," "fool of a lawyer," "cup of water," "King of England," and "north of here," to express a possessive relationship or other similarly 'close' connection (J. Rath, pers. comm. 1989; cf. Crystal 1985:136). Uninflected forms of Upper North Wakashan plant names which incorporate the aforementioned proclitics are presented in favor of the contracted forms (i.e., HE mnáks tútua). This practice is followed to indicate unambiguously the application of this

common naming pattern of Upper North Wakashan plant names; one which is indicative of genitive case (i.e., 'X of Y'). For a comprehensive discussion of the preceding concepts as well as other phonological and grammatical features of Upper North Wakashan isolects the reader is referred to Lincoln & Rath (1980, 1986) and Rath (1981). Asterisks precede terms whose transcription has not been verified by any of the aforementioned linguistic specialists. Other botanical terms are presented here in the form in which they originally appeared and the source(s) of these (or other linguistic) data should be consulted for explanatory text regarding their orthographic characteristics.

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⁹In notes under the heading, "Nootka, Nitinat Lake," Rollins recorded that "Mr. Peters recalled being told by his uncle to chew puffballs (probably <u>Lycoperdon</u> <u>perlatum</u>) to stop a bleeding nose." At the beginning of these notes Rollins indicated that Mr. Kelly Peters was formerly of the Pacheenaht Band of Port Renfrew, B.C. No band affiliation was recorded for Mr. Kelly's uncle.

¹⁰Among the Chippewa <u>B</u>. <u>pila</u> was used as a charm (Densmore 1928:288) and as "paint for the dead" (p. 377) although at least one other puffball species (<u>Calvatia craniiformis</u> Schw.) was used to treat epistaxis (p. 356).

¹¹In the Haida language, shooting stars are known as kē'itsāo kwā'rau (lit., 'star excrement') (Boas 1891:192), indicating that perhaps a similar belief regarding puffball origins existed among the Haida people of the Queen Charlotte Islands. It is interesting to further note that the same puffball name occurs among at least one cultural group outside the Pacific Northwest. Among the Maori, <u>Calvatia caelata</u> (Bull.) Morg. is known as tutae kehua ("faeces of ghosts") or tutae whetu ("faeces of stars") (Brooker and Cooper 1962:12).

12RH commented that puffballs were believed to come from shooting stars and further stated that the term HE mnák yis tútua ('excrement of stars') sounded familiar although he could not definitely confirm the existence of an Oowekyala cognate used to refer to puffballs.

¹³Note, however, that other botanical terms such as HE pspiijú yis_luáł (lit., 'ear of ghost,' i.e.,the fungal galls produced by an organism tentatively identified as

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Exobasidium sp. affin. vaccinii (D.B.O. Savile, pers. comm. 1990) on false azalea (Menziesia ferruginea Smith) and HA k^wisbis hs_hzid [lit., 'snowflakes of ghost,' i.e., the wind-borne seeds of fireweed, <u>Epilobium angustifolium</u> L. (E. Bach, pers. comm. 1989; GR)] evoke the concept of spiritual entities yet neither species was shunned for any reason. In fact, both these species were used traditionally for food. (See also footnote 23).

¹⁴Incidentally, the puffball property of releasing spores in a cloud resembling smoke inspired linguistic reinterpretation of the ethnic designation, "Kwakiutl." In Haisla, <u>Bovista</u> spp. are called either HA, GL k^wak^wk^wsduàýu hs_ñziġ, "puffball of ghost" or simply HA k^wak^wk^wsduàýu. Linguistic and semantic analyses of these Haisla terms implies their association with the "smoky" nature of puffball spores (Compton & Rath 1988), suggesting an etymology for the ethnic designation, "Kwakiutl," consistent with Kwakiutl insistence that their name means "smoke of the world" despite Boas' misgivings regarding the validity of that interpretation (Boas 1897:330).

¹⁵This identification is based on the use of a photograph of this species (Lincoff 1981, photograph 638). GR denied that photographs or dried specimens of several closely related species represented HA, GL ğazq hs_hug^wis.

¹⁶The unidentified plant, HA $\check{x}u+\dot{c}n$, is said to grow in the Kitlope area near hot springs and to attain a height of only several inches. GR stated that this term was used primarily by the Tsimshian and by people of Kitamaat and that there was a different Kitlope name for this plant which he could not recall. No other plant name or description similar to those provided by GR have been found in the available ethnobotanical materials pertaining to Northwest Coast groups. The only similar use encountered is that of Gunther's report (1973:26) of the use of <u>Peramium decipiens</u> (Hook.) Piper. (<u>Goodyeara oblongifolia</u> Raf.) by Klallam women (of western Washington) who "rubbed this plant on their bodies to make their husbands like them better." GR denied that a dried specimen (<u>Buckland s.n.</u>, <u>11 Aug. 1939</u>, UBC) and photographs of <u>G. oblongifolia</u> were representative of HA $\check{x}u+\dot{c}n$ is the botanical identity of this organism remains problematic. 17Using the phonemic inventory developed by Lincoln and Rath (see footnote 9), this term would appear as Xtayas (lit., 'love plant') (N. Lincoln, pers. comm. 1990).

¹⁸Using the phonemic inventory developed by Lincoln and Rath (see footnote 9), this term would appear as $\hat{X}aq^wa$ $\hat{X}ta\hat{y}as$ (lit., 'red love plant') (N. Lincoln, pers. comm. 1990).

¹⁹Even geographically and ethnolinguistically distant groups such as the Nlaka'pamux (Thompson), an Interior Salish group, attributed similar properties to members of Orchidaceae. To these people the white-flowered bog orchid, or fragrant white rein orchid [Habenaria dilatata (Pursh) Hook. var. <u>leucostachys</u> (Lindl.) Ames], was believed to bring various types of good luck (e.g., in hunting) and was further believed by Nlaka'pamux women to help attract a mate (Turner, et al. 1990:138).

 $^{20}\mbox{This}$ is Heiltsuk elder Maggie Windsor's pronunciation of the term for ground cone.

²¹Using the phonemic inventory developed by Lincoln and Rath (see footnote 9), this term would appear as pugws (cf. Footnote 22) (N. Lincoln, pers. comm. 1990).

²²Boas earlier noted that KW p!ōq!ŭs was "an edible plant" (1921:1403) and that KW p!ō´q!wɛs (here using an orthographic variant of the same term) was "an edible fungus growing on roots of salal bushes" (1947:13) although no further details of its use as a food were provided (cf. Turner & Bell 1973:287). Boas' later report (1932b:225), and the data obtained during the present research, suggest that the reports of edibility may be inaccurate. On the other hand, Hesquiat consultants regard this species as being edible (Turner & Efrat 1982:70) and Kari (1987:161) reports that among the Tanaina of Alaska, the cooked roots of a related species, <u>B. rossica</u>, are regarded as an emergency food. Boas gave yet another similar term, KW pɔ́´xwas, which he identified as "fruit of <u>Menziesia ferruginea</u> Smith [false azalea] (Boas 1947:130; cf. Turner & Bell 1973:283). Other evidence from the author's research on Upper North Wakashan ethnobotany indicates that this term may in addition refer to the edible "berry-

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like" fungal pathogen of false azalea, known in Heiltsuk as pspiiģú yis_luáł, lit., 'ear of ghost' (see also footnote 14).

²³Using the phonemic inventory developed by Lincoln and Rath (see footnote 9), this term would appear as nixayu. This term means, literally, 'instrument of pulling,' and therefore has the same etymology as HE wádáyú/OO wàdayu (N. Lincoln, pers. comm. 1990). Evelyn Windsor, who elicited this term from MHu, provided the transcription as níxayu (J. Carpenter, pers. comm. 1990).

²⁴This term, as transcribed by Evelyn Windsor, was used by MHu and AW to refer to "swamp violet" (<u>P. vulgaris</u>) (J. Carpenter, pers. comm. 1990).

²⁵The term HE \dot{y} ix \dot{y} is is a plural word (sg. HE \dot{y} is) that refers to <u>P. vulgaris</u> but means "spread out on the ground" (N. Lincoln, pers. comm. 1990; cf. Rath 1981:740). MHu and AW considered "swamp violet" to be the only referent of this term.

²⁶This identification is tentative because RH had never seen this plant. It was known to him through his father's description of its appearance (i.e., a plant with purple flowers), habitat, and traditional use. However, given the comparable Heiltsuk data on this species, this identification seems likely. This term can also be used to denote the fishing line used to jig for bottom fish (e.g., red snappers, cod, and other species). The Haisla cognate, HA wadàyu does not have as its referent any type of herbal talisman. Instead, it is said to refer to cut boughs of balsam, HA mudùlas [Abies amabilis (Dougl.) Forbes; Pinaceae, pine family], when used as a type of "sleigh" to pull cargo across deep snow (GR). GR also said that this term was used as a personal name by a Klemtu man. In this context the name was said to refer to pulling slaves. No Kwak'wala cognate corresponding to HA wadàyu, HE wádáyú and OO wàdayu has been attested (N. Lincoln, pers. comm. 1990).

²⁷Of these taxa, <u>Bovista</u> spp. are fungal saprophytes, <u>B</u>. <u>hookeri</u> is a flowering parasite on the roots of salal (<u>Gaultheria shallon</u> Pursh), and <u>P</u>. <u>vulgaris</u> is an insectivorous flowering plant of swamps and bogs.

28It seems somewhat inappropriate to refer to such attributes as utilitarian in the strictest sense as their efficacy is a matter of personal perception and therefore ill-suited to rigorous scrutiny in terms of their objective empirical verification.

²⁹The proper transcription of this term is debatable. Stevenson reported "w!x"c'ini" based on his elicitation of the term. It may be more likely that the term should be written as "w!x"cni" instead. The former term probably includes the suffix meaning "manner, way, how one..." while the latter term includes the suffix meaning "body" (N. Lincoln, pers. comm. 1990).

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