

Would a bird by any other name sing as sweet?

A cross-linguistic study of two *Sylvia* warblers' names

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Abstract

Ample material for a lexicological and terminological study is provided by over ten thousand species of birds, many with multiple local names. Some of them follow the scientific name, while more creative ones put forward different characteristics of a bird, e.g. *Sylvia melanocephala* 'black-headed wood-dweller' vs *fauvette mélanocéphale* 'black-headed warbler' vs *pěnice bělohrdlá* 'white-throated warbler' vs *occhiocotto* 'cooked eye' vs *Sardinian warbler*, etc. This onomasiological diversity makes one wonder how bird names are created in different languages, what morphological structures are resorted to, and what semantic features are included in different names of the same bird. Such questions have already been discussed in terminology as far as concepts or artefacts are concerned. This paper compares the names for *Sylvia atricapilla* and *Sylvia melanocephala* in some thirty languages, using a combination of intra- and cross-linguistic methods and assembling the two "arch-concepts". The study points out the specificity of bird names, between linguistic signs, scientific terms and proper nouns or nicknames. The underlying denomination principle consists in selecting a limited number of salient but distinctive semantic features, i.e. characteristics of the bird, and attributing them the corresponding lexical items: nouns, adjectives, suffixes or combining forms.

Keywords: bird names, cross-linguistic study, arch-concept, motivation, black-headed warblers.

Résumé

Plus de dix mille espèces d'oiseaux et leurs multiples noms locaux alimentent l'étude lexicologique et terminologique. Si certains noms copient le terme scientifique, d'autres, plus créatifs, privilégient des caractéristiques différentes, e.g. *Sylvia melanocephala* 'habitant des forêts à tête noire' vs *fauvette mélanocéphale* vs *pěnice bělohrdlá* 'oiseau-chanteur à gorge blanche' vs *occhiocotto* 'œil cuit' vs *Sardinian warbler* 'oiseau-chanteur de Sardaigne', etc. Une telle diversité onomasiologique pose la question de savoir comment les noms d'oiseaux sont créés dans différentes langues, selon quelles structures morphologiques et quels traits sémantiques sont inclus dans les différents noms d'un même oiseau. Ces aspects ont déjà été abordés en terminologie en ce qui concerne les concepts ou les artefacts. Cet article compare les noms pour *sylvia atricapilla* et *sylvia melanocephala* dans une trentaine de langues, en s'appuyant sur des méthodes d'analyse intra- et interlinguistiques ; les traits sémantiques ainsi extraits forment deux « archi-concepts ». L'étude souligne la spécificité des noms d'oiseaux, entre signes linguistiques, termes scientifiques et noms propres ou surnoms, ainsi

que le principe de dénomination qui consiste à sélectionner un nombre limité de traits sémantiques saillants et distinctifs (les caractéristiques de l’oiseau en question) et à leur faire correspondre des noms, adjectifs, suffixes ou morphèmes savants.

Mots-clés : noms d’oiseaux, étude interlinguistique, archi-concept, motivation, oiseaux-chanteurs à tête noire.

1. Introduction

Birds are ubiquitous and more readily observed in the wild than other creatures. With their beautiful colours and voices, entertaining behaviour and ability to fly, they hardly remain unnoticed. From Icarus to Aristotle to Linnaeus and present-day ornithologists, all manner of enthusiasts have admired birds, while some people still fear them. Until very recently, fear and admiration alike resulted in hunting them for food or for sport, or sacrificing them for divination, out of superstition or in the name of science: a newly discovered bird was killed and naturalised, destroying its naturalness in the process, before being studied and described. Modern instruments and methods such as binoculars, telescopes, cameras and DNA analysis have suppressed the need to kill for science, although Moss (2018) claims that even birding is “a sublimated form of hunting”.

This research aims to contribute to the knowledge of birds and bird names and to promote their conservation. It stems from (1) my life-long interest in wildlife, (2) my academic background in lexicology and terminology and (3) my frequent observation of two warblers not unlike each other in size and appearance, one of which happens to be the emblem of the local bird society, GOR¹.

The apparent inconsistency in the names of these two little birds sparked further investigations, which snowballed into this multilingual onomasiological study. In French, one is called *fauvette à tête noire* ‘warbler with a black head’, the other *fauvette mélanocéphale* (< gre.² *mélan(o)*- ‘black’ and *céphale* ‘head’), which means exactly the same. The two names, one from Greek, the other one vernacular, are suppletive and ought to be synonyms because this is how suppletive lexical forms usually function, e.g. *kidney stone*, *renal calculus* (*renal* ‘kidney’ and *calculus* ‘stone’) and *nephrolith* (*nephro*- ‘kidney’ and *-lith* ‘stone’), of vernacular, Latin or Greek etymology respectively, refer to the same medical condition (Depierre, 2005, p. 85). *Fauvette à tête noire* and *fauvette mélanocéphale*, however, refer to two different species. Likewise, the scientific terms for these two species, *atricapilla* (< lat. *atr(i)*- ‘black’ and *capill(-a)* ‘hair’) and *melanocephala*, from Latin and Greek, respectively, are suppletive but not synonyms. By contrast, the English names, *blackcap* and

¹ GOR stands for “Groupe ornithologique du Roussillon”, which is based in Perpignan and actively involved in conservation and education.

² The abbreviations follow the ISO 639-2/B code for the representation of the names of languages (cf. table 1, annex).

Sardinian warbler, are dissimilar in form and in meaning, probably due to the geographic range of the birds: only the former is common in Britain.

This paper compares the names of the two birds in some thirty languages, addressing the questions of how bird names are created in different languages, what morphological structures are resorted to and what semantic features are included in different names of the same bird.

The next section (§2) opens with historical remarks about bird names (§2.1), deals with multilingual terminology and the “arch-concept” (§2.2), arbitrariness in linguistics (§2.3), the morphology, motivation, use and status of bird names (§2.4 and §2.5), then prepares the ground for semantic analysis of bird names (§2.6) and explains the methodology used to build and analyse the corpus underlying this study (§2.7). The corpus is further discussed in part 3, starting with facts about the two warblers (§3.1), then presenting an intra- and cross-linguistic study of the generic and specific names for European *Sylvia* warblers (§3.2), concluded with arranging the semantic features of *atricapilla* and *melanocephala* into two arch-concepts (§3.3), prior to a general conclusion about denomination (§4). The findings from the corpus are summarised in tables in the appendix.

2. Background and methodology

2.1. A little history of English bird names

Birds have been given names from time immemorial, although few have survived in oral tradition or written records. Etymologists have traced some of them to PIE roots, e.g. *goose*³ “must have come into existence by 3000 BC, at the latest”, which makes it “the most ancient bird name” in English (Lockwood, 1984, p. 71). Several strata in the nomenclature emerge from various entries of the dictionary section (Lockwood, 1984):

- very old⁴ names going back to at least the second millenium BC, e.g. *starling*
- names based on the natural histories of Pliny and Aristotle; unfortunately not many birds mentioned in these early works have been identified as present-day species, e.g. *basileus* ‘king’ could be the *goldcrest* or *firecrest* (Lacroix, 1937), the *wren*, or a sort of *warbler* (Jobling, 2010)

³ Bird names are capitalised in Lockwood (1984), Lacroix (1937), World Birdlist (2011) and other scientific sources.

⁴ “Only in the case of names expressly coined by ornithologists or other specialists [...], is it possible to date precisely the creation of a name. But the great majority of our bird names are folk names, arising anonymously” (Lockwood, 1984, p. 11). Many old bird names are opaque, as their motivation has become lost through the ages because of systematic phonetic changes or corruption or because they come from a language which is no longer in use, e.g. *auk* from Old Norse *alka* ‘neck’ (Lockwood, 1984, p. 25).

- another early stratum, probably Proto-Germanic, when an abstract noun could be transformed into a bird name, e.g. *swan*
- bird names from Old English, possibly of Germanic age, e.g. *rook*
- words from older languages or dialects such as Scottish, Gaelic or Old Norse, e.g. *auk*
- adjectives used as singular nouns pointing to an origin in medieval English when any adjective could automatically function as a noun, e.g. *swift*
- compounds, mostly bahuvrihi⁵, suggesting a medieval or later origin, e.g. *blackcap*
- noa terms, typically used by fowlers, replacing a tabooed name, e.g. *gannet*
- misnomers due to “an erroneous normalization” (Lockwood, 1984, p. 34), e.g. *brambling*
- names coined by naturalists⁶, e.g. *warbler*.

The relatively recent standard nomenclature has retained some of the folk names and created many others from Latin or Greek elements, Latin being the language of science at the time when Linnaeus⁷ introduced the binomial system in the first half of the 18th century and Pennant⁸ adapted it to British bird names soon afterwards: “our present-day scientific terms are a last reminder of the tradition of learned writing in Latin” (Lockwood, 1984, p. 13). Unsurprisingly, a host of terms with such diverse origins present great morphological and semantic differences.

2.2. Multilingual terminology and Thoiron’s “arch-concept”

In my search for a methodological framework to analyse the diversity of bird names, I turned to multilingual terminology, which allows for “the addition of information extracted from the morphology of homologous terms in various languages” (Thoiron, 1994, p. 765). From the case study of *slide rule*, the author infers that a concept is composed of smaller elements of meaning, which he calls “traits conceptuels” (Thoiron, 1994, p. 766), i.e. concept features, crystallising two years later into the notion of “arch-concept”:

⁵ The term *bahuvrihi* is from Sanskrit ‘much rice’ denoting a rich person. Most English bahuvrihi compounds are based on *synecdoche* (part-for-the-whole), e.g. *white-collar*, sometimes including a metaphor, e.g. *greenhorn*.

⁶ “The general evolutionary trend towards uniformity in the language naturally paved the way for the highly standardized ornithological nomenclature current in English today” (Lockwood, 1984, p. 13).

⁷ Modern scientific names of plants, animals and birds use Carl Linnaeus’s binomial *Genus species* pattern, which evolved from previous less systematic and lengthier methods of denomination; the old names were based on encyclopaedic knowledge, which was filtered into the binomial name, e.g. “*Physalis annua ramosissima, ramis angulosis glabris, foliis dentato-serratis*” was subsequently replaced by *Physalis angulata* (https://en.wikipedia.org/wiki/Carl_Linnaeus).

⁸ Pennant “began the practice of adapting British names, or coining new ones, to accord with the scientific classification initiated by Linnaeus 1758”. (Lockwood, 1984, p. 14)

Equivalent terms (designating homologous concepts in different languages) are broken down into their basic naming elements which are then put together into a set. This panlinguistic set is regarded as representing an arch-concept which groups all the features of the concept in the studied languages. As it is basically at the cognitive level, the arch-concept offers a finer representation of the concept than an analysis depending on one natural language only (Thoiron, Arnaud, Béjoint & Boisson, 1996, p. 512).

In other words, just as a concept can be divided into “semantic features”, a term can be analysed into smaller constituents or “elements of nomination”, which in turn consist of one or several morphemes each, following the hierarchy: term → elements of nomination → morphemes (Thoiron et al., 1996, p. 513).

Obviously, not all the semantic features of a given concept can be included in one term in a given language; it would not be linguistically economical. Hence the advantage of a multilingual terminological approach based on the assumption, which seems to be confirmed by linguistic reality, that different languages will express different concept features in homologous terms for a given concept. What this has to do with bird names is discussed in §3.3 below.

2.3. Linguistic arbitrariness and bird names

A conspicuous characteristic of most bird names is their transparency, as opposed to the arbitrariness of the linguistic sign. This arbitrariness is posited as the first general principle of linguistics (Saussure, 1916, p. 100); such notorious exceptions as onomatopoeias are not counted as organic elements of a linguistic system (p. 101); Saussure introduces the subcategory of genuine onomatopoeias, pointing out that they are few and partly based on arbitrary choice, since they are an approximate and half-conventional imitation of certain noises (p. 102), e.g. *splash*. Saussure further rejects motivation, which contradicts the above-mentioned principle of arbitrariness, by arguing that even echoic names are only motivated at creation time, before being integrated into the system of a given language and being submitted to the same phonetic or morphological evolution as them, proof that they have lost their inner motivation in order to become linguistic signs, which are generally unmotivated (p. 102); the illustrative example given by Saussure to prove his point is a bird name, *pigeon*, from Vulgar Latin *pīpiō*, derived from an onomatopoeia.

More recent work on sound symbolism has confirmed the older speculation that “there might be a non-arbitrary relationship between the physical aspect of a speech signal and its meaning” (Ohala, 1994, p. 1). As pointed out by Saussure and other linguists after him, most of the lexicon is – or has become with time – arbitrary, since “an essentially unlimited set of meanings is to be conveyed by a decidedly small and finite inventory of speech sounds”; however, “a small part of the set of meanings [...] have a non-arbitrary relation to the sounds expressing them” (Ohala, 1994, p. 1).

This study claims that not only echoic but also many non-echoic bird names belong to this “small part of the set of meanings” and are at least partly motivated due to their morphology (§2.4).

2.4. The morphology, motivation and use of bird names

Saussure’s treatment of echoic names leaves out the fact that the motivation, i.e. transparency, of a linguistic sign or a term is correlated to its morphology and increases with its complexity.

Simplex, mainly one-syllable words are likely to be unmotivated, e.g. *tree*, unless their motivation has become opaque with time, which is often the case with bird names, e.g. *auk*; however, some simplex bird names have remained transparent, e.g. *swift*.

Two-syllable or longer derivatives exhibit a higher degree of motivation than the deriving word to which they are related, e.g. *warbler* vs. *warble*.

One-unit terms tend to be opaque, while multi-unit terms tend to be motivated (Thoiron et al., 1996, p. 514). The latter is true of many compound⁹ bird names, e.g. *redbreast*¹⁰.

In items of the scientific nomenclature, the degree of motivation increases with the number of morphemes, e.g. *treecreeper*, *greater white-fronted goose*.

My *a priori* guess was that the commonest bird names would be transparent and convenient to use two-unit compounds based on vernacular stems. This is true in many languages including English, e.g. *blackcap* and *Sardinian warbler*, among others. In French, alongside terms such as *rouge-gorge*, *gobemouche*, *mésange bleue*, etc., more difficult ones are to be found: the adjective *mélanocéphale*, with its Greek roots and five syllables, is neither transparent nor convenient for everyday use; still, there is no simpler synonym but the apocope *mélano* (Lesaffre, 2000, p. 220), which confusingly¹¹ refers to a warbler, *fauvette*, and to a gull, *mouette*, both described as *mélanocéphale*. Even Modern Greek has vernacular names such as *mavrotsirovákos* ‘black warbler’ and in no other language but French are learned combining forms used regularly in common bird names, e.g. *goéland leucophée* (< gre. *leuc(o)*- ‘white’ and *-phée* ‘grey, dark’), and in everyday words; there is no other word for an amateur bird-watcher than *ornitho*, short for professional-sounding *ornithologue*, a headache is commonly called *céphalée* as well as *mal de tête* (‘ache of head’), *cat’s eyes* along the road are known as *catadioptrés* (< gre. *cata* ‘downwards’ and *dioptré* ‘mirror’), *word-formation* is *lexicogénèse* (*lexic(o)*- ‘lexicon’ and *genèse* ‘genesis’), to name but a few; so *mélanocéphale* is not exceptional.

⁹ Compounds are understood very broadly here, including true as well as syntactic compounds.

¹⁰ The motivation may not be apparent in older compounds, e.g. *redstart*, *yellowhammer*, *wheatear* (Moss, 2018), which only etymological research can explain.

¹¹ In English, the compound *blackcap* is used as the standard term for *S. atricapilla* as well as a common folk name for several different species, including the *black-headed gull* (Lockwood, 1984, p. 31).

To coin a new term in a given language, one can choose between a one-unit term (OUT), a two-unit term (TUT) and a multi-unit term (MUT), with TUTs being the most convenient, more transparent than OUTs and shorter than MUTs. As illustrated in this paragraph, MUTs, at least those for artefacts, human organisations or scientific terms, are almost immediately shortened into initialisms or acronyms. Bird names contradict this trend.

MUTs are highly frequent in the World Birdlist and other such lists precisely because they belong in a nomenclature and are not really fit to be used discursively in a scientific, let alone literary or poetical context. While an author such as Poe hardly needs to be precise about the species of that vulture whose eye is of great significance in *The Tell-Tale Heart*¹², a “scientific paper on the social habits of some Peruvian lizard is useless if it does not tell you *which* Peruvian lizard” (Wright, 2014, p. 3, author’s italics). If a context requires scientific accuracy, binomial names are used in botany and zoology. Flora and fauna field guides aimed at the lay person also need to be specific. Thus, the purpose of scientific binomial and specific vernacular terms seems to be informative, i.e. identification of a species, rather than discursive; length and complexity do not seem problematic, as long as enough relevant information is present in a name.

2.5. The linguistic status of bird names

The birds themselves may be unaware of the various and often changing names that humans bestow upon them, but these names are not without consequences. It is probable that a term, through the elements of nomination present in it, influences the awareness of a concept in speakers of a given language (Thoiron et al., 1996, p. 523). Birds, however, are no abstract concepts. Their various names can have the following linguistic characteristics and status:

- morphologically complex and / or semantically transparent descriptive terms in scientific nomenclature, e.g. *great black-headed gull*
- descriptive, transparent vernacular compounds and derivatives, usually shorter than the above and more generic, e.g. *blackbird*, *treecreeper*
- names with human characteristics conferred to birds, e.g. *laughing gull*
- fanciful and often scientifically inaccurate folk names, some including a diminutive suffix and / or relying on metaphor, e.g. *busquet* ‘small twig’ or *capellanet* ‘little priest’ for *Sylvia melanocephala* in Catalan
- first names given affectionately and becoming common nouns, e.g. *robin*, especially in folk names, e.g. *black-capped peggy*; they are close to nicknames, a highly motivated subcategory of proper nouns.

¹² Poe, E. A. (1843). *The Tell-Tale Heart*, a short story.

Furthermore, due to migrations, the exact same species is visible in several parts of the world and has consequently received names in different languages or dialects spoken within the bird's geographic range¹³, although naturally in those parts of the world from which the bird is absent no folk names have been recorded, only standardised ones. The names for *atricapilla* and *melanocephala* in various languages will be discussed in §2.6 and §3 below.

2.6. Methodology for building and analysing the corpus for this study

The corpus¹⁴ built by the author of this paper for this study consists of the names of the two above-mentioned black-headed warblers (BHW) in some thirty languages or dialects¹⁵; the sources are Avibase¹⁶, Oiseauxnet¹⁷ and the World Birdlist (2011)¹⁸; the BHW corpus (cf. table 1, appendix) remains open to include other languages and was extended to the seventeen European *Sylvia* warblers in the same set of languages, creating the ESW corpus¹⁹.

To analyse the bird names in the two corpora, I used a combination of three of Boisson's four semantic analysis methods (1996, p. 559):

1. The traditional lexicographic method involves the study of the object itself, i.e. the visual, vocal and other characteristics of a given bird.
2. The etymological method helps to date terms and to analyse older ones which have become opaque through the ages; it will be of little relevance here.
3. The intra-linguistic comparative method contrasts a term with other related terms within a given language; in this study, the comparison is with the names of other birds in the same group, i.e. *Sylvia* warblers.

¹³ Folk names offer multiple variants for the same bird, e.g. 68 in German and over 100 in Italian for *atricapilla* (Desfayes, 2008), due to the ubiquitous presence of the bird and the numerous dialects spoken before the language was standardised. Not many folk names may have survived into the 21st century.

¹⁴ "Corpus" is, unfortunately, not to be understood here as a collection of texts – for lack of available sources – but as a list of words or a nomenclature.

¹⁵ The total number depends on how one counts Serbian and Croatian.

¹⁶ A database information system about all birds of the world, containing data about 10,000 species and 22,000 subspecies. The site is hosted by Bird Studies Canada, the Canadian copartner of Birdlife International. Bird names in several languages are included (<https://avibase.bsc-eoc.org>).

¹⁷ A website created and maintained by volunteers and offering descriptions, drawings and photos of more than 7,000 species of birds, as well as their names in several languages (<http://www.oiseaux.net>).

¹⁸ An XLS document, which is no longer available online, including the scientific, English and French names of 9,913 bird species. A more recent multilingual version, available on <https://www.worldbirdnames.org/>, can be used for further studies.

¹⁹ The ESW corpus is an XLS document too large to present in A4 format, but is available at lexique.univ-lille.fr/data/images/numero-24/ESW-corpus.xls.

4. Cross-linguistic comparison contrasts one term with its equivalents in other languages; the reliability of this method depends on the number of languages compared; the greater this number, the more fine-tuned the conclusions (Boisson, 1996, p. 559). This is why the BHW and ESW corpora cover some thirty languages.

2.7. Towards a semantic analysis of bird names

To my knowledge, there is no ready tool for the analysis of a corpus of bird names. To build one, I started with a list of bird characteristics, e.g. colour, voice, etc., placing them in a table by category and illustrating them with bird names in English and French from the World Birdlist²⁰. Eight broad categories, some with subdivisions, emerged:

1. Visual elements: size, colour or any distinctive part of bird anatomy such as a crest, a spur, wattles, etc; metonymy, or rather synecdoche²¹ *aka* part-for-the whole, along with metaphor, may be present, especially in bahuvrihi compounds

2. Vocal elements

3. Behaviour, including feeding habits

4. Habitat or range, including a place name or an adjective

5. Proper nouns referring to people (they provide no information about the bird, but honour the naturalist who first described it or someone who contributed or even a mythological figure)

6. Metaphors, frequent in bird names

7. Borrowings from a vernacular or adaptations or calques of scientific binomials

8. Bird names which have become so opaque with time that an etymological study is necessary.

Any combination of the above is possible in theory, usually resulting in multiple-unit terms.

The names of the two black-headed warblers in the languages of the corpus were analysed according to these categories; the results are visible in tables 2 and 3 in the appendix and discussed below.

²⁰ The resulting table with its numerous examples is too bulky to present here, but is available at lexique.univ-lille.fr/data/images/numero-24/Conceptual-features-bird-names.doc. It is not a systematic study of the names in the World Birdlist, which could become a research topic of its own.

²¹ “Metonymy is defined as “using one entity to refer to another that is related to it. [...] We are including as a special case of metonymy what traditional rhetoricians have called *synecdoche*, where the part stands for the whole [...] Metaphor is principally a way of conceiving of one thing in terms of another, and its primary function is understanding. Metonymy, on the other hand, has primarily a referential function, that is, it allows us to use one entity to *stand for* another” (Lakoff & Johnson, 2003, pp. 35-6).

3. Analysis and discussion of the corpus

3.1. Exploring the referent: facts about warblers

3.1.1. *Blackcap* vs. *Sardinian warbler*

Inspired by Boisson’s lexicographic method, my first step was to draft a detailed encyclopaedic description of the two warblers from several sources, e.g. Stastny (1989), Lohmann (2011), Heintzel, Fitter & Parslow (2014), Oiseauxnet, etc. and from direct observation. The data were used for extracting the semantic features leading to the “arch-concepts” (§3.3).

S. atricapilla and *melanocephala* are very similar in size (14 vs 13.5 cm)²², share a habitat of low shrubs and bushes, and feed on insects and berries. The differences are in colour, voice and range: *atricapilla* is all grey but for the top of the head – black in the male, reddish-brown in the female; *melanocephala* is also mainly grey, with a white throat and red circles around the eyes and shiny black head and cheeks in the male, the female having more subdued greyish colours; *atricapilla* sings melodiously and is common throughout Europe; *melanocephala*’s song is like chirping and the bird is common around the Mediterranean. One or several of these features appear in the names in various languages (cf. table 1, appendix), e.g. dut. *zwartkop*, nor. *svarthodesanger*, ita. *occhiocotto*.

In direct observation, the most conspicuous feature is the colour of the head in the males of both species. In *melanocephala* the red eye is noticeable only in close-up, but the white throat is clearly distinct as though calculated to generate a name, just as the black (top of the) head is in *atricapilla*. However, *whitethroat* is taken by four warblers other than *melanocephala* and *blackhead* is unsuitable for a bird name in English, because of its meaning ‘blemish on the skin’; besides, the colour of the head differs in the two sexes. Thus, observation alone is of little use without a systematic linguistic backup.

3.1.2. European *Sylvia* warblers (ESW)

My second step was to add data about other *Sylvia* warblers prior to an intra- and cross-linguistic study.

The World Birdlist includes twenty-two *Sylvia* species and two subspecies. Some of them are widespread throughout Europe, others are localised around the Mediterranean. Five do not live in Europe at all, but in Asia or Africa; they are called *warblers* in English, but the generic name in French is *parisome*. Seventeen European species are listed in bird manuals: Sterry (2006), Heintzel (2014) and Svensson, Mullarney & Zetterström (2010) list all 17, Peterson & Mountfort (2012) and

²² While a five-millimetre difference may seem negligible, by warbler standards it counts, witness the adjective ‘greater’ (vs. ‘lesser’) in Dutch, Bulgarian and Macedonian (cf. table 1, appendix).

Dubois, Le Maréchal, Oliosio & Yésou (2008) list 14, Cabard & Chauvet (1995) and Dubrac, Nicolle & Michel (2005) list 13, Stastny (1989) lists 9, Jiguet (2011) lists 8. The seven most common European warblers, including the two under study, are *atricapilla*, *borin*, *communis*, *curruca*, *hortensis*, *melanocephala* and *undata*.

The input of modern science is based on Shirihai, Gargallo, Helbig & Harris (2001), who list twenty-two *Sylvia* species and classify them based on “general similarity of body proportions, plumage and distribution” (p. 25), as well as vocalisations, sexual dimorphism, DNA and mitochondrial evidence, all combined into what is called a “consensus phylogeny”. The authors infer that *atricapilla* and *borin* split from all the others in the group *c.* 12-16 million years ago; although the exact age is hypothetical due to the lack of older fossils, “*Sylvia* warblers have been present on earth three times as long as upright-walking ‘man-apes’” (Shirihai et al., 2001, p. 27). Within the Mediterranean group, species diversified *c.* 5.5-8.5 million years ago, during a very long period of drought when the sea shrank considerably and *Sylvia* habitats were restricted to isolated pockets.

Scientific nomenclature was conceived well before mitochondrial and DNA tests became available, drawing extensively on older folk names which do not take into account the bigger picture of genera, families, etc., only what distinctive visual, vocal or other characteristics are conspicuous; this has led to many inconsistencies, misnomers and false friends in the old and new names of *Sylvia* warblers in various languages.

3.2. Applying the intra- and cross-linguistic methods

A comparison of the names of *Sylvia* warblers shows that appearances are misleading.

The *Subalpine warbler* is not found in any subalpine region; the misnomer is based on the earlier scientific name *subalpina*, now changed to *cantillans*.

The *Sardinian warbler* is *S. melanocephala*, while *S. sarda* stands for *Marmora's warbler*.

Against expectations, the *garden warbler* is not *S. hortensis* but *S. borin*. The homologous *fauvette des jardins* in French is a similar misnomer, also found in German, as well as the Scandinavian and most Slavic languages, which points to a common and old source of the misnomer.

The inconsistencies increase with the number of birds and languages considered. For instance, several *Sylvia* species are greyish in colour, *S. atricapilla* being the most uniformly so, apart from its “cap”. However, this particular warbler does not feature “grey” in its name, unlike others which exhibit the characteristic to a lesser extent:

S. communis in eng. **grey** whitethroat (a folk name), fre. *fauvette grisette*, rus. **серая** славка, ukr. кропив'янка **сіра**

S. curruca in por. *papa amoras cinzento*

S. sarda in mlt. *bufula grīza*

S. borin in hrv. *siva grmuša*.

Among other features used indiscriminately across languages to name different species are the habitat of nettles²³ or (thorny) bushes, the Sardinian connection and life in the desert.

This terminological tangle is probably due to the limited choice of distinctive semantic features (cf. §2.7). Salient visual, vocal or behavioural characteristics are preferred for a local bird, producing a motivated, transparent name for it, while for an unfamiliar one the vernacular name is often a calque of the scientific binomial or involves geographic range or a person's name. This trend is clearly illustrated by the descriptive English names for local warblers such as *blackcap* and *whitethroat*. The names for the unfamiliar ones include a place name or adjective evocative of their range outside the British Isles: *Sardinian*, *Subalpine*, *Balearic*, *Asian desert*, or a person's name: *Rueppell's*, *Hume's*, *Tristram's*, *Menetries's*, *Marmora's*. Though also motivated to a certain extent, such names remain opaque insofar as they do not depict the referent.

3.2.1. Generic names for *Sylvia* warblers

The scientific name of the genus *Sylvia* is not totally adequate, as some but not all *Sylvia* warblers dwell in the woods; *atricapilla* and *melanocephala* do not. Instead of *Sylvia*, Avibase uses *Curruca*, of uncertain etymology, sounding echoic²⁴; it is also the common generic term for *warbler* in Spanish. Linnaeus originally named the genus *Motacilla* 'wagtail', which describes a wide variety of small birds and now refers to a different genus.

The imitative name *warbler*²⁵ extends well beyond the genus *Sylvia* to c. 50% of the *Sylviidae* family (197 out of 397 species) and has numerous equivalents in French in addition to *fauvette*: *pouillot*, *bouscarle*, *phragmite*, *rousserolle*, *hypolais*, *dromoïque* and many more. Conversely, among

²³ The connection of *atricapilla* with nettles is present in one Germanic and two Slavic languages (fry., bul., ukr.); that of *melanocephala* in bul., ukr. and pol.; ice. has *netfusöngvari* 'nettle singer' for *S. curruca*. The presence in such old languages from different linguistic groups as fry., ice. and bul., seems to indicate that 'nettle' is a very old feature retained in the names. To explain it, most field guides are unhelpful, with the exception of Lohmann, according to whom the bird's nest is placed in bushes or tall nettles (2011, p. 46), while Desfayes (2008) suggests that *nettle* is to be understood in the broad sense of 'shrubs' or 'bushes'.

²⁴ *Curruca* is an unidentified bird mentioned by the Roman poet Juvenal, active around 100-127 AD; the term might refer to the *dunnock*, which is fooled by the *cuckoo* to hatch and bring up its young one, with *curruca* thus meaning 'cuckold'; Linnaeus named *curruca* the *lesser whitethroat*, possibly inspired by its now obsolete Swedish name *kruka* (Jobling, 2010, p. 125).

²⁵ Warbler: "A generic term introduced by Pennant 1773 to render Scopoli 1769 *Sylvia* literally (bird) belonging to the woodlands. Evidently both words were chosen for want of something better. [...] several Warblers have since been removed from the genus *Sylvia* to various other genera; [...] their vernacular names thus witnesses to the systematics of an age gone by" (Lockwood, 1984, p. 31).

the nineteen species of *fauvettes* in the World Birdlist, only fourteen are called *warblers* in English; the names of the remaining five follow the part-for-the-whole pattern: *blackcap* (1), *whitethroat* (4).

Fauvette comes from *fauve*, a generic term for a wild beast, referring to its reddish-brown colour, but seems to have lost its motivation. Although some *Sylvia* warblers display this colour, most do not; both *atricapilla* and *melanocephala* are grey.

In Catalan, the generic term *tallarol*, derived from *tallar* from Vulgar Latin *taleare* ‘cut, divide’, evokes the contrast between the colour of the head and the rest of the body²⁶.

In most other languages in the BHW corpus, the generic term is based on voice (ice. *söngvari*, dan., nor., afr. *sanger*, fry. *sjonger*, cze. *pěnice*, slo. *penica*, rus. *славка*, gre. *tsirobákos*) or habitat (dut. *grasmus* or *braamsluiper*, ger. *Grasmücke*, fry. *nettelkrûper*, bul. *коприварче*, pol. *pokrzewka*, ukr. *кропив'янка*, hrv. *grmuša*, mac. *грмушарче*, bel. *леска*, epo. *silvio*) and in one case on the colour of the head (por. *toutinegra*).

While simple but ambiguous terms such as *warbler* or *fauvette* may be used for conversational or literary purposes, more precision is necessary in a scientific context, where a majority of two-unit vernacular compounds might be expected (cf. §2.4) under the influence of the scientific binomial system, which follows the *Surname name* pattern (Lesaffre, 2000, p. 192). This is sometimes true, e.g. *Sylvia nisoria*, *fauvette épervière*, *barred warbler*, but not always: if the scientific name contains more than two roots, those vernacular names inspired by it will be multi-unit terms, e.g. *Phylloscopus magnirostris*, *pouillot à gros bec*, *large-billed leaf-warbler*, while independently created vernacular names departing from the scientific name are likely to be simple or two-unit terms.

3.2.2. Specific bird names across languages

- Morphology

In BHW (cf. table 1, appendix), the specific names for *atricapilla* tend to be shorter and morphologically simpler than those for *melanocephala*, probably because the *blackcap* is common throughout Europe, so it is more likely to be seen and its name to be used discursively in various languages.

One or more suffixes are frequently added to a simple or a compound noun in Slavic languages (slv. *črno^{glav}ka*, pol. *kapturka*), which also use adjectives in denominations (bul., rus., ukr.), especially for the *Sardinian warbler*.

²⁶ According to “the greatest Catalan etymologist of the 20th century, Joan Coromines”. Special thanks go to Pr Joan Peytaví Deixona, Casa dels Països Catalans, University of Perpignan (UPVD), private communication, for providing this information.

Names in Romance languages tend to contain a preposition (fre. *fauvette à tête noire*, cat. *tallarol de casquet*), while Germanic languages may include the possessive case (ger. *Mönchsgrasmücke*).

Compounds are found in languages belonging to different linguistic groups (eng. *blackcap*, dut. *zwartkop*, swe. *svarthätta*, ita. *capinera*, slv. *črnoglavka*, epo. *nigrakapa*, gre. *mauroskoufīs*).

- Semantic features: black head, white throat, red eye, etc.

Most names for *atricapilla* draw on the semantic feature ‘black head’ either literally (French and most Slavic languages) or metaphorically (English and most Romance languages, also swe., ice., dut., afr., pol., hrv., epo. and gre.), while dan., nor. and ger. use the monk metaphor, also inspired by the colour of the head.

Catalan and French diverge, although both are spoken in areas where the two warblers are present: *tallarol capnegre* looks homologous to *fauvette à tête noire*, but is the equivalent of *fauvette mélanocépahale*.

French is the only language to borrow the scientific term *melanocephala*, only slightly adapted in spelling and grammar, while *atricapilla* is calqued.

In gre.²⁷ *melanocephala* is *maurotsirobákos* ‘black warbler’, possibly influencing mlt. *bufula sewda*, which means the same; in both languages the colour of the head is extended metonymically. In cze. it is called *pěnice bělohrdlá* ‘white-throated warbler’ after its very conspicuous white throat; ita. *occhiocotto* ‘cooked eye’ focuses metaphorically on the red ocular circle, which is made even plainer in cos. *capinera ochjirossa*; although it is much less visible than the white throat, the red circle is a salient feature.

In languages spoken in areas where *melanocephala* is not present, e.g. eng., rus. and ukr., names do not describe the bird itself but its foreign geographic range; adjectives such as *Sardinian* or *Mediterranean* are more useful in a scientific list than in the field. Of more practical use are names based on the bird’s habitat: shrubs, bushes, nettles, brambles, olive-trees, ditches (hrv., mac., fry., pol., ukr., bul., rus., por.); the link with woods is found in the scientific binomial, as well as epo. and bel.

The names featuring ‘velvet’ (swe., ger., pol. and epo.) are based on metaphor: the shiny²⁸ black head of *melanocephala* is like velvet. One may wonder whether the metaphor is synaesthetic (Day,

²⁷ Scientific binomial names are coined by scientists not from Modern but from Ancient Greek as well as Latin elements, independently from the evolution of bird names in Modern Greek, where the combining form *melan-* is not used in the name for *Sylvia melanocephala*; however, it is present in other bird names, e.g. *melanóglaros* ‘black gull’, the name for the *lesser black-backed gull*, i.e. *Larus fuscus*.

²⁸ The black head of *atricapilla*, from Latin, *ater* ‘dull black’ as opposed to *niger* ‘black’, seems duller in comparison.

1996), with a term for the sense of touch used for a visual feature, or whether it actually implies touching, following the custom to kill a bird prior to describing and naming it.

Part-for-the-whole bird names are similar to nicknames given after some physical or other feature; “there are many parts that can stand for the whole. Which part we pick out determines which aspect of the whole we are focusing on” (Lakoff & Johnson, 2003, p. 36). So different names of the same bird may include different features according to how the bird is perceived and by whom the name was coined. Ultimately, a bird name expresses the name-giver’s point of view of the bird: folk names such as *colehoodie*, *black-capped peggy* sound affectionate though unscientific vs. bul. *ГОЛЯМО ЧЕРНОГЛАВО КОПРИВАРЧЕ* ‘greater black-headed little nettle-creeper’²⁹, verging on the definition.

A fairly accurate representation of the two birds can be inferred by adding up the above semantic features in different languages. At an abstract, cognitive level these features congregate into two “arch-concepts”, of a cross-linguistic nature, which offer a finer representation of the concepts (here the two birds) than an analysis depending on one natural language only (Thoiron et al., 1996, p. 512) (cf. §2.2 above and §3.3 below).

3.3. Bird names and the arch-concept

Thoiron et al. (1996, p. 515) state that a concept is accessed through the term used to name it, in particular through its elements of nomination. A working list of the concept features can be obtained by listing the elements of nomination. In the case of the slide-rule, the elements presented by the authors are: {*|RULE|*, *|CALCULATE|*, *|SLIDE|*, *|LOGARITHMIC|*} (p. 517).

While it was primarily aimed at scientific and technical terminology in a multicultural environment, Thoiron’s multilingual approach was easy to adapt to this study of two bird names.

The semantic features extracted from the terms in table 1 (appendix) and arranged together give access to the two “arch-concepts”. The result is a list of characteristics not unlike what can be seen in field guides or fact files, only in a more synthetic form. The “concept features” of a bird name include visual aspects, such as size and colour, as well as vocal performance, feeding and nesting habits, habitat or geographic range. Although no actual name in any language can possibly include all of them, the cross-linguistic method of adding the semantic features results in an abstract, i.e. “conceptual”, representation of the two birds as follows:

²⁹ There is an apparent contradiction between ‘greater’ and ‘little’. The latter accounts for the diminutive suffix *че* in the generic term *коприварче*, while *голямо* ‘greater’ is opposed to *малко* ‘lesser’ in the name for *melanocephala*.

- *atricapilla*

{BIG + **SING(ER)** / **WARBLER** + **BLACK HEAD** / HAIR / **CAP** / **HAT** / HOOD / PATE / CROWN + **NETTLES** / **SHRUBS** / **BRAMBLES** / VINEYARDS / **WOODS** + HUMAN METAPHOR (monk) + BIRD METAPHOR (nightingale)}

- *melanocephala*

{SMALL + **SING(ER)** / **WARBLER** + **BLACK HEAD** / **CAP** / **HAT** / HELMET + VELVET (metaphor) + WHITE THROAT + RED EYE / COOKED EYE (metaphor) + GREY COLOUR (overall) + **NETTLES** / **SHRUBS** / **BRAMBLES** / OLIVE-TREES / **WOODS** + MEDITERRANEAN / SARDINIAN}

The overlaps in the two sets of semantic features, materialised in bold type above, may explain those in the names of the two warblers in various languages, which draw upon these semantic features.

The method can be extrapolated to analyse other zoological or botanical names.

Tables 2 and 3 (appendix) summarise the semantic features and the various terms corresponding to them in the BHW corpus. Multi-unit terms, which include more than one semantic feature, fit into several categories.

4. Conclusion

It is possible to love birds and enjoy their presence without knowing their names. Still, many bird-watchers feel satisfaction and pride after putting the correct tag on a bird, while several bird websites use an old Chinese proverb as an epigraph: “The beginning of wisdom is to call things by their right names” (Wright, 2014). Birds have been given names from time immemorial, although few very old ones have been preserved in oral tradition or written records. Names depend on the information available about a bird, its interaction with and utility for humans. Vocal or visual features are retained as some birds are heard more often than seen, others are easy to see and some are so familiar that they are given human names or part-for-the-whole nicknames after some physical feature; thus, a bird name is usually highly motivated and can express the name-giver’s point of view.

Bird names have a special morphological and semantic status due to their greater degree of motivation than other linguistic signs. Many bird names in the official nomenclature draw from folk names³⁰, which rely on direct observation and analogy and tend to be generic, imprecise and sometimes inaccurate, especially old ones which rely on knowledge restricted to local birds; such

³⁰ After selection by an authority, i.e. one influential naturalist such as Linnaeus or Pennant in the past, or a present-day commission, such as IOC (International Ornithologists’ Union) or CAF (Commission de l’Avifaune Française).

names are morphologically simple, often based on metonymy or metaphor, which brings them close to proper nouns or to bahuvrihi nicknames, e.g. *blackcap*, *redbreast*, etc. On the contrary, the scientific nomenclature for birds takes into account all known species around the world, as well as encyclopaedic knowledge about them, generating multi-unit terms which combine compounding and derivation, along with descriptive adjectives, and include as much generic and specific information as possible, all of which contributes to increasing their degree of motivation; unlike other scientific terms, bird names are not normally reduced to initialisms or acronyms, despite their length, as they are used for species identification purposes rather than discursively.

To be used discursively, a name needs to be relatively short, which means that it cannot include all the possible features of a concept or characteristics of a bird. Different names of the same bird may be based on the selection of different characteristics depending on salience, which is rarely absolute but often relative to a system, such as a family of birds. To be useful in denomination, a salient feature also needs to be distinctive of the species compared with other similar species, in particular those present in the same geographic range.

The inconsistency prevalent in bird names is probably due to (1) an origin in folk names based on non-scientific methods of observation, (2) scientific binomial names coined by ornithologists with various degrees of knowledge of Latin and Greek roots, (3) efforts at standardisation which are not always welcomed by users³¹ and (4) evolving scientific methods and new classifications in agreement with DNA and mitochondrial evidence.

The names for *atricapilla* and *melanocephala* may not be more inconsistent than those for other warblers, birds, animals or plants³², whether they are considered in one given language or cross-linguistically. It seems hardly possible to do better: their most conspicuous characteristic, the black head, is so common, especially in warblers, that it can hardly be used as a reliable distinctive feature. The metaphor *blackcap* confers originality – and therefore distinctiveness – but, as is often the case with species with sexual dimorphism, only suits the male bird. Two more features of *melanocephala* are salient: the white throat and the red eye. Unfortunately, neither is restricted to this species and therefore cannot be distinctive. Geographic range is not conclusive in itself, as most *Sylvia* warblers are European and several are Mediterranean.

Ultimately, the principle underlying the denomination of a bird in any given language involves selection from a list of available lexical descriptors for a limited number of salient semantic features, i.e. characteristics of the bird. Both the descriptors and the semantic features are in a limited number,

³¹ Although bird names have a specific status between common words and scientific terms, they follow linguistic rules so it is hardly possible for one person or even a commission to change them, unless the linguistic community is ready to take the change, as was the case in Linnaeus's day.

³² No comparative study with the denomination of other species has been conducted yet by the author of this paper, but would be of interest for further research.

but not restricted to one bird or to birds in general; they overlap other lexical fields and other referents: animals, plants, etc.

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³³ Bird websites, manuals and field guides are presented in a separate section.

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Appendix

lat. ³⁴	Scientific binomial name	<i>Sylvia atricapilla</i>	<i>Sylvia melanocephala</i>
eng.	English	blackcap	Sardinian warbler
fre.	French	fauvette à tête noire	fauvette mélanocéphale
cat.	Catalan	tallarol de casquet	tallarol capnegre
ita.	Italian	capinera	occhiocotto
cos.	Corsican	capinera	capinera ochjirossa
mlt.	Maltese	kapinera	bufula sewda
spa.	Spanish	curruca capirotada	curruca cabecinegra
por.	Portuguese	toutinegra-de-barrete-preto	toutinegra-dos-valados
dan.	Danish	munk	sorthovedet sanger
nor.	Norwegian	munk	svarthodesanger
swe.	Swedish	svarthätta	sammetshätta
ice.	Icelandic	hettusöngvari	hjálmstöngvari
dut.	Dutch	zwartkop	kleine zwartkop
afr.	Afrikaans	swartkroonsanger	? ³⁵
ger.	German	Mönchsgrasmücke	Samtkopf-Grasmücke
fry.	Western Frisian	nettelkrûper	?
bul.	Bulgarian	голямо черноглаво коприварче	малко черноглаво коприварче
mac.	Macedonian	црноглаво грмушарче	мало црноглаво грмушарче
rus.	Russian	славка черноголовая	средиземноморская славка
ukr.	Ukrainian	кропив'янка чорноголова	кропив'янка середземноморська
bel.	Belarusian	леска-чорнагалоўка	?
pol.	Polish	kapturka	pokrzewka aksamitna
cze.	Czech	pěnice černohlavá	pěnice bělohrdlá
slo.	Slovak	penica čiernohlavá	penica sivá
slv.	Slovenian	črnoglavka	žametna penica
hrv. (srp.)	Croatian (Serbian)	crnokapa grmuša	grmuša crnoprhnica
epo.	Esperanto	nigrakapa silvio	velurkapa silvio
gre.	Modern Greek	μαυροσκούφης (maurosκούφης)	μαυροτσιροβάκος (maurotsiroβάκος)

Table 1. *Sylvia atricapilla* vs *Sylvia melanocephala* in some European languages and dialects.

³⁴ First come the scientific nomenclature – which is reputed to be from Latin (lat.), although it draws elements from Ancient Greek, as well as other languages – and the two main languages of this study, English and French, then other languages according to family: Romance, German, Slavic, followed by Esperanto and Modern Greek. The abbreviations follow the ISO 639-2/B code for the names of languages.

³⁵ The question mark indicates ‘data unavailable in my sources’.

<i>Semantic features</i>		<i>Terms</i>
SIZE	big	bul. голямо
COLOUR (without metaphor)	whole body	fre. fauvette
	black head	fre. à tête noire ita., cos. capinera, mlt. kapinera dut. zwartkop, slv. črnoglavka slo. čiernohlavá hrv. crnoglava bul. черноглаво
COLOUR (with metaphor)	black cap	eng. black-capped , epo. nigrakapa
	black hair	lat. <i>atricapilla</i>
	black hat	hrv. crnokapa
	black beret	por. de- barrete-preto
	black crown	afr. swartkroonsanger
BAHUVRIHI (with metaphor)	blackcap	eng. blackcap
	black top of head	gre. mauroskoúfis
	blackhat	swe. svarthätta
METAPHOR	monk	dan., nor. munk, ger. Mönchsgrasmücke
	(little) cap	pol. kapturka
	hood(ed) singer	ice. hettusöngvari
	nightingale	eng. mock nightingale, northern nightingale
HABITAT	nettles	fry. nettelkrûper bul. коприварче ukr. кропив'янка pol. pokrzewka hrv. grmuša
	shrubs	por. (regional) papuxa das amoras
	brambles	gre. (Cyprus) ampelopúlli
	vineyards	lat. <i>Sylvia</i> , bel. леска , epo. silvio
	woods	
RANGE	Europe, Eurasia	eng. European, Eurasian
	north	eng. northern
TYPE of BIRD (generic term)	song bird	eng. warbler, ice. hettusöngvari afr. swartkroonsanger slo., slv. penica

Table 2. Semantic features and the corresponding terms in the BHW corpus for *Sylvia atricapilla*.

<i>Semantic features</i>		<i>Terms</i>
SIZE	small	bul. малко mac. мало dut. kleine fre. fauvette
COLOUR (without metaphor)	whole body	fre. fauvette , slo. sivá, cat. tallarol, mlt. sewda
	black head	lat. <i>melanocephala</i> spa. cabecinegra por. de- cabeça-preta dan. sorthovedet, nor. svarthodesanger
	white throat red eye	cze. bělohrdlá cos. ochjirossa
COLOUR (with metaphor)	black cap	cat. capnegre, dut. zwartkop
	black tuft	por. toutinegra
BAHUVRIHI (with metaphor)	velvet hat	swe. sammetshätta
	cooked eye	ita. occhiocotto
METAPHOR	helmet	ice. hjálm söngvari
	velvet(y)	slv. žametna , pol. aksamitna
	velvet + cap	epo. velurkapa
	velvet + head	ger. Samtkopf
HABITAT	nettles	ukr. кропив'янка
	shrubs	hrv. grmuša
	olive-trees	rus. масличная
	ditches	por. dos- valados
	woods	lat. Sylvia , epo. silvio
RANGE	Sardinia	eng. Sardinian
	Mediterranean sea	rus. средиземноморская ukr. середземноморська hrv. sredozemna
TYPE of BIRD (generic term)	song bird	eng. warbler, spa. curruca dan. sanger, nor. svarthodesanger ice. hjálm söngvari slo., slv. penica

Table 3. Semantic features and the corresponding terms in the BHW corpus for *Sylvia melanocephala*.