# The origin of the birdwatching term 'jizz'

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Radde's Warbler *Phylloscopus schwarzi*

**Abstract** The term 'jizz' was introduced to ornithology by T. A. Coward in 1921. There is no evidence for any other etymology. In this paper we explain the origin and spread of the word. We also examine some false explanations of its origin. In particular, it is simply untrue that GIS or GISS – 'General Impression and Shape' (and Size) – were ever used for aircraft recognition and were transferred to birds as 'jizz'.

## The introduction of the term 'jizz' into birdwatching

Methods of recognising and identifying birds have evolved over the last two centuries (Greenwood & Greenwood in prep.). Jizz has probably always been important in the field but, apart from Chapman's (1895) statement – 'There is generally more character in the flight of a bird than there is in the gait of a man. Both are frequently indescribable but perfectly diagnostic, and you learn to recognise bird friends as you do human ones' – it was scarcely recognised in the literature until it was given a name. It is strange, therefore, that the true origin of the term 'jizz' is unknown to most birdwatchers; even more curiously, many appear to believe an entirely erroneous history.

Some authors, following James Fisher, continue to state that 'jizz' was introduced by W. H. Hudson, despite Fisher correcting himself in print and this being noted by the editors of *British Birds* in a response to Muldal (1984). In fact, the first use of 'jizz' as a birding term in print was by T. A. Coward in a 'Country Diary' column in *The Manchester Guardian* on 6th December 1921, reproduced with limited changes as a chapter in his 1922 book *Bird Haunts and Nature Memories*. Coward recounted that 'A West Coast



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Irishman was familiar with the wild creatures which dwelt on or visited his rocks and shores; at a glance he could name them, usually correctly, but if asked how he knew them would reply, "By their jizz".' Coward explained further: 'If we are walking on the road and see, far ahead, someone whom we recognise although we can neither distinguish features nor particular clothes, we may be certain that we are not mistaken; there is something in the carriage, the walk, the general appearance which is familiar; it is, in fact, that individual's jizz.'

None of Coward's published writings identify the Irishman (although he subsequently referred to 'an old Irish fisherman'; Coward 1931) or reveal when and where Coward learnt about 'jizz'. His obituary in *BB* stated that he never visited Ireland (Oldham 1933a); and his Field Notes from 1883 to 1933 (archived in the Alexander Library, at the University of Oxford) record no visits to Ireland. Hence the story he presented was probably second-hand. We have searched his correspondence (also in the Alexander Library) and have found some from Irish naturalists but none that mentions jizz. There are letters from C. B. Moffat, a prolific nature-writer in Ireland (Kennedy 1946), but we found nothing from Coward in Moffat's correspondence (archived in the Royal Irish Academy). Tony Usher, author of a useful biography of Coward (Knutsford Ornithological Society 2016), has pointed out to us that Coward spent many years in Manchester, where there was a strong Irish community; he attended Owen's College (now the University of Manchester) and then worked in the city for 19 years. Perhaps an Irish Mancunian was Coward's source.

By 1922, Coward was a well-known writer and lecturer, with a regular column in *The Manchester Guardian*, articles in many other newspapers and magazines and five books to his name, mostly on birds and other natural history. His book *The Migration of Birds* (1912) had sold well, with a second edition in 1912 and a third in 1929 (Bourne 1985), while *The Birds of the British Isles and their Eggs* (Coward 1920–26) was 'the most successful bird book of its day... [and] perhaps did more to promote birdwatching than any other book of the interwar period' (Marren

**187.** Thomas Alfred Coward, photographed in 1929 at the Altrincham sewage-farm in Cheshire by John Armitage (reproduced from *British Birds*).

2003); see also Oldham (1933a,b). His reputation as an author must have led many to read *Bird Haunts and Nature Memories* and its reprinting in the year after publication shows its popularity. He published four other bird books afterwards, plus *Life of the Wayside and Woodland* (1923), mentioning jizz in at least two of them (Coward 1927, 1931). In addition, *A Book about Birds* (Turner & Gurney 1925) referred to jizz in terms similar to those of Coward. Written for Boy Scouts and Girl Guides, this was an excellent introduction to the biology, behaviour and ecology of birds (reviewed in *BB* by N. F. Ticehurst; *Brit. Birds* 19: 160). Emma Turner was a well-known writer, lecturer and bird photographer, so the book probably alerted a wide readership to Turner's enthusiastic presentation of the value of jizz in bird recognition. Nonetheless, use of the term appears to have spread slowly. We found only four other written references to the term before 1950: in Fish-Hawk (1938) and on three occasions in newspapers – *The*


**Fig. 1.** Green Woodpecker *Picus viridis*, by Benjamin Fawcett. This illustration shows the bird but contains no jizz at all; the bird is as wooden as its perch. This style reflects how wooden many (most?) nineteenth-century pictures of birds were. F. O. Morris's *History of British Birds* was published in six volumes by Groombridge & Sons (London) in 1851–57; this scan is from *The Birds of Britain* by James Fisher (Collins, 1947).

*Manchester Guardian*, 13th October 1931 and 12th March 1949, and *The Times of India*, 31st March 1939.

## 'Jizz' in Irish English

Discussing the origin of 'jizz', Draper (1985) recalled Irish friends using the word 'to imply spirit or cockiness'. In this non-ornithological sense it occurs neither in the *Oxford English Dictionary* nor in most dictionaries of Irish English (e.g. Mac an Bhainisteora 2001, Dolan 2012); but Cassidy (2007) included it as meaning 'excitement, heat, passion', while as far back as 21st July 1900 *The Weekly Irish Times* described participants in a water-polo match having 'put plenty of "gizz" into their play'. McDonald (2016) discovered it in a play published in 1918 ('there's not much jizz about the old chap'; Robinson 1918) and in an editorial in *The Irish Times* (10th January 1920), which sarcastically referred to the 'Civil Service's proverbial pep and jizz'. After that, the word was increasingly used in *The Irish Times* (occasionally spelt 'gizz' up to 1930), with a meaning of 'spirit' or 'liveliness', and it became a standard part of the journalists' vocabulary. Neither the use of the word in *The Irish Times* in 1920 nor its use with the g-spelling in the *New Leader* magazine in the same year (quoted by Laffan 1999) used quotation marks, suggesting that the word was considered standard in Ireland, as it has continued to be. The fact that it does not appear in most dictionaries of Hiberno-English (Irish English) may be because the compilers assumed that since it is so common in Ireland it is also used in British English. In fact, the word is rarely, if at all, used in the Irish sense in Great Britain.

Coward's use of 'jizz' is clearly different from the standard Irish-English use. Either Coward misinterpreted the west-coast Irishman's usage or the Irishman was using the word in a different sense from that normally used in Ireland – individuals and local communities not infrequently attribute slightly different meanings to words, especially more informal ones.

Can etymology help in determining how the two meanings of 'jizz' came about? In the 1923 reprint of *Bird Haunts and Nature Memories*, Coward added a footnote: 'Since the publication of the first edition, a friend pointed out that in Webster's dictionary both "gis" and "jis" are given as obsolete variants of "guise", and this seems to be the origin of the expressive word.' Furthermore, the *OED* states that 'guise' is 'coincident in sense' with 'jizz' in the birdwatching sense, which would fit with the west-coast Irishman using 'jizz' in that sense (Burchfield 1976). However, the dictionary continues 'but the phonetic relationship remains unexplained [the 'g' in 'guise' is hard] and the two words may therefore be unrelated.' An alternative suggestion

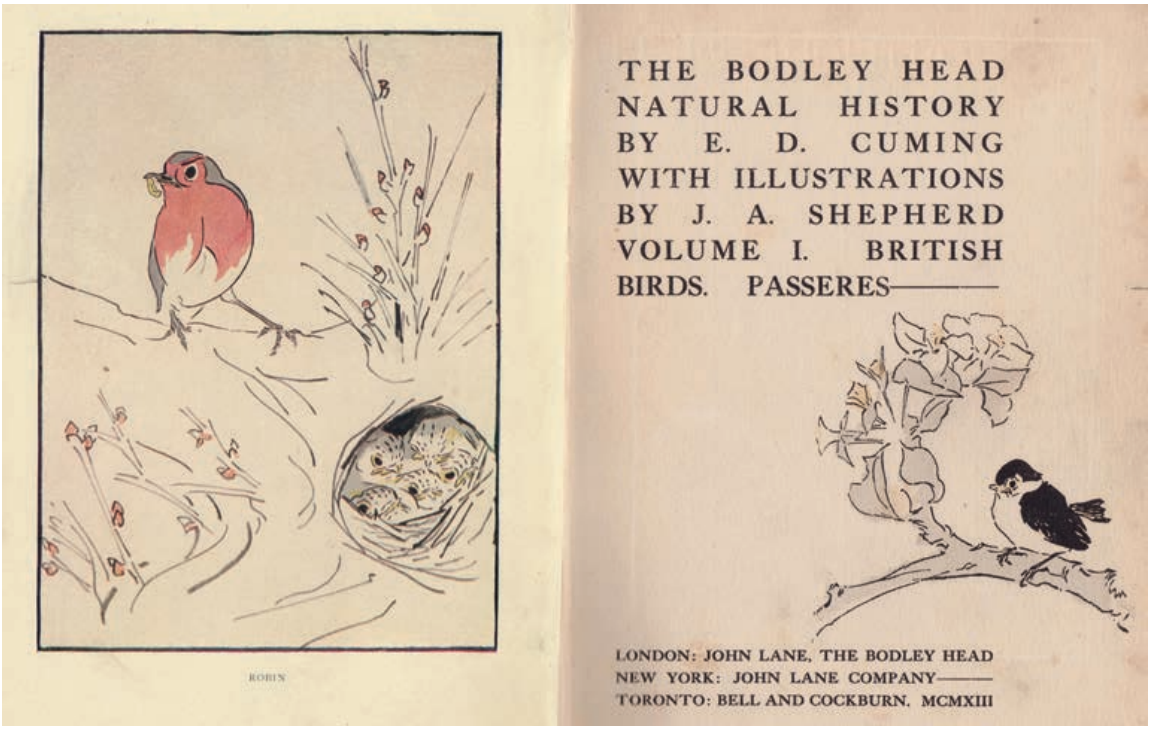


**Fig. 2.** Shepherd's Robin *Erithacus rubecula*: frontispiece by J. A. Shepherd from Cuming (1913). This was one of the first books to present really lively illustrations of birds; a second volume was published in 1914. Shepherd, who was well-known as an animal caricaturist, also illustrated, with similar liveliness, *Songs of the Birds*, by W. Garstang (John Lane, 1922).

by one of McDonald's (1996) correspondents that 'jizz' came from 'gist', which would fit with the Irishman's apparent meaning, is etymologically unsupported. The possibility of a Gaelic origin was considered by McDonald (1996) but his enquiries revealed no Gaelic origin for 'jizz'. We asked the Gaelic scholar Pádraig Ó Macháin and three of our friends who are native Irish speakers: none could think of a Gaelic word from which 'jizz' could have sprung. The etymology is thus unclear, throwing no light on how the shift in meaning between the standard Irish English and the birdwatchers' usage occurred.

## The post-war spread of 'jizz' in British birdwatching

As well as examining a selection of bird books published between 1950 and 1990, we have made electronic searches of the archives of both *BB* and *Ibis* and used Google Scholar to search the academic literature. These searches did not reveal every use of 'jizz' in the two journals but do illustrate the historical pattern of use.

The first post-war mention that we found in *BB* was in 1950, in a review of Quick (1948) by J. Duncan Wood (*Brit. Birds* 43: 29–30), who wrote that Quick looked at birds 'with an artist's eye for those peculiarities of shape, outline and stance which give a species its "jizz"'. The word must already have been widely used among birdwatchers for Wood to have used it without explaining its meaning. It was then used increasingly often, with a peak in the mid 1980s (fig. 3), when there were several notes on the origin of the term and on the value of jizz as an aid to identification (and the contrary view that more attention should be paid to identifiable plumage criteria). Its main uses in *BB* have been in the identification of individual species and in distinguishing similar species. Since its first use in *Ibis*, in 1962, 'jizz' has been used at about half the annual rate of that in *BB*, almost always in book reviews.

Use of the term 'jizz' in books increased in parallel with its use in journals. Robertson (1950), who devoted a 26-page chapter to an excellent account of bird identification, advocated the use of jizz (among other things) and used the term explicitly. His book was, however, chiefly about his experiences of photographing birds, so his advice on identification may have reached only a fraction of the birdwatching community. In subsequent

decades, although some identification books referred to the recognition of birds with which one was already familiar, few used the term 'jizz'. For example, Maurice Burton's 1952 edition of *Birds of the Wayside and Woodland* stated that 'An experienced ornithologist can tell what bird he is looking at even from a distance and even though it is only a black shape silhouetted against the sky', while Hutson (1956) stated that 'field recognition relies more upon a combination of characteristics… It is a composite picture of the bird in its environments that field recognition requires'; yet neither used the term 'jizz'. Of the two hugely popular field guides of the 1950s, Fitter & Richardson (1952) used the term but Peterson *et al.* (1954) did not.

With the exception of Hayman & Burton (1976), the field guides of the 1970s and 1980s appear not to have mentioned jizz, even though most of them had notes on identification techniques in their introductions (e.g. Bruun & Singer 1971, Heinzel *et al.* 1972, Hayman 1978, Ferguson-Lees *et al.* 1983, Harris *et al.* 1989). Hume (1990) broke the mould by producing an identification guide based almost entirely on jizz and since then many guides have referred to jizz.

It took some time for 'jizz' to be considered a part of the standard lexicon. During the 1950s and 1960s, *BB* always used quotation marks around 'jizz', suggesting that it was not then regarded as standard, but by the mid 1980s quotation marks were as often missing as used. In *Ibis*, Yapp used the word unadorned in 1983 but most others used quotation marks until the late 1990s, after which their use declined rapidly, though they are still used by some authors in both journals. Ornithological reference books and dictionaries of the 1950s and 1960s (e.g. Lister 1956, 1962, Thomson 1964) did not include 'jizz', but later ones did, from Weaver (1981) and Campbell & Lack (1985) onwards. *The Times* first used 'jizz' (in relation to bats) on 14th June 1960, though not again until 1988 (in a note about dictionaries; Howard 1988). It appeared in the *OED* supplement of 1976 (Burchfield 1976).

## The wider use of 'jizz'

'Jizz' in its ornithological sense has not often appeared in print in Ireland. Of the annual *Irish Bird Reports* (1953 to 1975), only the issues for 1974 and 1975 included it; *Irish Birds* used it in 1977 (its first year of publication) but has not since; *The Irish Naturalists' Journal* used the term in 1964 but then not until 2001, apart from its use being condemned in an editorial in 1970 (Vol. 16, p. 321) because it had 'not yet reached the dictionary pages'. The first use of 'jizz' in its birdwatching sense in *The Irish Times* was not until Viney (1990) used it, and thereafter it has appeared sparingly in that newspaper. However, referring to the acrobatics of Common Starlings *Sturnus vulgaris*, Viney (1991) used it also in the traditional Irish sense. Therein perhaps lies the reason why the word is little-used in its ornithological sense in Ireland: since the word is already familiar but with a different meaning, using it in the ornithological sense could be confusing.

'Jizz' is widely used in a birding context in North America (though commonly spelt 'giss' or 'gizz'), in Australia and New Zealand, and by English-speakers in Africa and the Indian subcontinent. However, North America has lagged behind Britain in using the term: judging by a Google search, the first

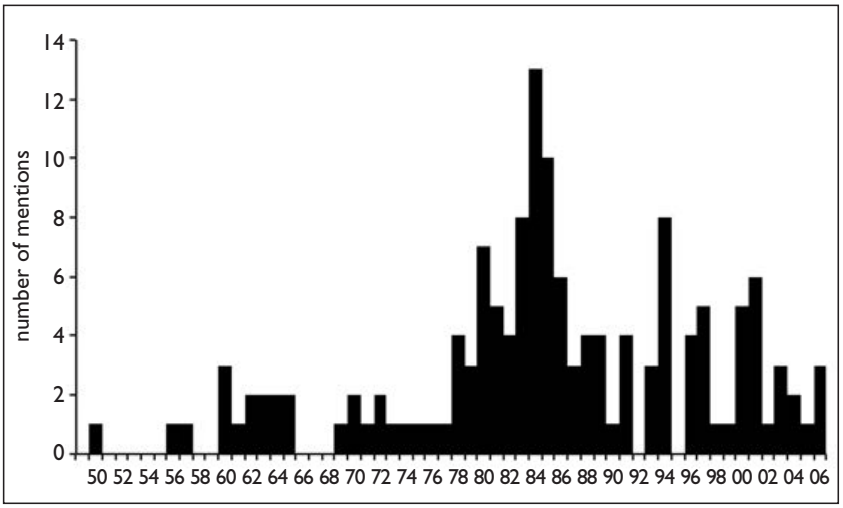


**Fig. 3.** Number of articles using the term 'jizz' each year in *British Birds*, 1949–2006.

American use in print was not until 1977. The term was used only 5–10 times per decade thereafter and it was invested in quotation marks on 70% of occasions. Surprisingly, Hayman & Burton (1976), two Britons writing a British guide, stated that the term – which they spelt 'gizz' – came from America.)

We have enquired about the ornithological use of 'jizz' in other European countries. None of our informants said that 'jizz' was not used in their country, though it was said to be very rare in Hungary. Birdwatchers in Denmark, France, Italy, Norway, Poland and the Netherlands use 'jizz' and appear to have no equivalent word in their own languages; those in Hungary, the Czech Republic, Germany, Spain, Finland and Sweden use both 'jizz' and one or more native words or expressions for the same thing. Some informants said it was used more by experienced or 'hard-core' birders; and in Germany the latter 'use a lot of English expressions (such as primary projection, primary spacing) when discussing field marks. This is mainly because this kind of birding is a relatively young discipline in Germany and papers dealing with these identification features are published mainly in English' (Jochen Diershcke *in litt.*).

**Fig. 4.** Common Coots *Fulica atra* on ice, from Hilda Quick's book *Marsh and Shore* (Jonathan Cape, London, 1948). In his review of the book in *BB*, J. Duncan Wood thought that her pictures captured the birds' jizz (see text); this was the first post-war use of the term found by the authors.

### The non-ornithological use of 'jizz'

'Jizz' has spread well beyond ornithology. We have found it being used in art history, in respect of interpretations of birds in art; in assessment of illustrations of organisms other than birds, ranging from plants to seashore life; in appraisal of taxidermy; in descriptions of clouds; in assessing how well composers have captured bird song in music; in consideration of an idea in general semantics; to support a particular view of decision-making; and in consideration of how scientists have to learn how to observe. Some of the uses of the word in other disciplines stretch it beyond its ornithological meaning but they serve to tell us how far this word has spread from its roots in the west of Ireland.

## Three widely believed but mistaken etymologies

Because the response to 'How do you know it's an X?' is often 'It just is', some have suggested that 'jizz' is short for 'just is'. No evidence has been presented to support this. The suggestion did not appear until almost a century after Coward had introduced 'jizz'; and none of the many explanations we have read of what 'jizz' means include anything like it.

Leahy (1982) recorded a suggestion that the birdwatchers' 'jizz' may be derived from the German 'gestalt', a term that became well known because of its use by a once-influential school of perception psychology. Svensson (1995, cited in Lerner & Tunón 2012), Sibley (2002), MacDonald (2002), and Moore (2010) have also remarked on the similarity of the meanings of 'jizz' and 'gestalt'.

However, the idea is surely weakened by the 'g' in 'gestalt' being hard; and completely undermined by the suggestion not having surfaced until 60 years after the first appearance of 'jizz' as a birdwatching term.

Despite it having been clearly established that 'jizz' was introduced to ornithology in 1921 and despite McDonald (1996) having cast severe doubt on the idea that 'jizz' entered the birdwatcher's lexicon via acronyms used in aircraft recognition during the Second World War, the majority of British and American birdwatchers believe this to be the correct etymology. The argument is seductively simple: during the war, those needing to recognise aircraft were supposedly taught to use General Impression and Shape (GIS) or General Impression, Shape and Size (GISS); birdwatchers, needing a label for their method of recognising birds by what we now call 'jizz', took on GIS or GISS, pronouncing and later spelling it as 'jizz'. This is a superficially plausible idea but is completely without foundation.

## Establishment of the GIS/GISS false etymology

In a letter in *BB*, Muldal (1984) asked where the term 'jizz' originated. The editor explained its appearance in Coward's 1922 book, while Bourne (1985) and Draper (1985) expanded on the editor's remarks. *BB* also published a letter by Harvey (1985) suggesting that: 'Surely "jizz" is a corruption of the old Army term "general impression and shape", used by patrols, guards, and, particularly, coastal/aerial watchers? It is still in use in the US Army at least, and is written "G.I.S."'. This appears to be the first mention of this false etymology but Harvey provided no evidence for it.

Despite lacking foundation, this idea has been promoted by many authorities on identification in North America and by some in Europe (e.g. Beaman & Madge 1998) and has been widely taken up on the internet and in popular publications. Most references to the idea are as brief and lacking in evidence as Harvey's original; a few are more detailed, such as that of Kloot (1995, cited in McDonald 1996) but are not backed up by reference to direct evidence. Importantly, its advocates have not explained why the idea did not appear until four decades after the war.

## Was GIS(S) used in aircraft recognition?

The GIS(S) idea for aircraft recognition itself is implausible: 'general impression' rarely delivers certain identification, and size is of little use because aircraft are usually seen without any background to provide scale. (This allows models to be used for training because, when viewed without any background, a model suspended nearby looks the same as the real thing a mile away. Indeed, gunners turned the relationship on its head, using identification and apparent size to estimate distance; Anon 1973). None of the statements that we have found about the use of GIS(S) in aircraft recognition is from an individual who used it or from a military or similar body. All are hearsay, not supported by reference to an authoritative source. Dictionaries that would surely have included it (e.g. Partridge 1942, Rufner & Thomas 1963) have no reference to GISS, GIS or jizz, nor do the two standard histories of the Royal Observer Corps – Winslow (1948) and Wood (1976) – cited in McDonald (1996).

McDonald (1996) sought evidence of the use of GIS(S) in Australia from the Department of Defence, Air Force Office, Royal Australian Air Force Historical Records and Information Services, and in the UK from the Ministry of Defence's Air Historical Branch (RAF). None of them had any record of GIS(S) ever having been used. Our own enquiry of the Royal Observer Corps Association Heritage Team, circulated to about a dozen of its members, also provided no evidence of GIS(S) having been used. The US Army Heritage and Education Center, US Army Military History Institute, was also unable to provide us with any evidence that GIS(S) had ever been used by the US military.

Hamilton's (1994) comprehensive history of military aircraft recognition in Britain lists many different techniques. Sabin established the WEFT method – in which observers were encouraged to pay special attention to Wings, Engine, Fuselage and Tail – promoted in *The Spotter's Handbook* (Chichester 1941). In the same year, Saville-Sneath's *Aircraft Recognition* added Undercarriage and Radiator to the list of important features, producing the

acronym WETFUR. Departing from these analytical approaches, *The Aeroplane Spotter* encouraged the use of 'mind pictures', in which 'outstanding features blend into one characteristic whole from whatever viewpoint it is seen' (Mowe 1941, cited in MacDonald 2002). Similarly, a 1946 UK War Office training manual on aircraft recognition stated: '...to the sportsman or country dweller a bird is recognised by its general appearance and method of flight (practical) – not by details of the exact shape of various parts of its body. Similarly, an aircraft is recognised by its general appearance and "sit" in the air, not by precise constructional details' (Anon 1946, cited in McDonald 1996). In the mid 1950s, the British adopted the 'Sargeant System', in which individual features were learnt in relation to the whole aircraft (Vicory 1968). The history of wartime aircraft recognition in the USA was similar to that in Britain: the ability of observers to respond to the total form of the aircraft (the 'whole image') rather than to a series of separate components ('image analysis') was stressed in some training programmes (Vicory 1968). Despite the variety of training methods that were used, and the fact that some relied on 'mind pictures' or similar, there is no mention of 'General Impression', 'General Impression and Shape', 'General Impression, Shape and Size', GIS or GISS in any of the above publications.

## Individual memories

James West, a birdwatcher and academic linguist, provided recollections to McDonald (1996), stating that 'I heard the term "GISS" used by one of my grandfathers, who was [in] the Royal Observer Corps' and that it was used in games after the war. In contrast to West, other individuals' memories do not support an origin of 'jizz' from aircraft recognition. Our birdwatching friends D. I. M. (Ian) Wallace (born 1933) and David Merrie (born 1935) grew up through the Second World War and the years immediately afterwards, when most of the aircraft recognition manuals produced for military and similar uses were actually sold to schoolboys (Ward 2014). Neither were aware of GISS/GIS being used in the context of aircraft recognition (pers. comms. October 2015). D. W. Oliver, another birdwatching friend, was in the Royal Observer Corps in the early 1960s. He and his colleagues were schooled in instant recognition of planes from monochrome photographs. Neither 'GISS', 'General Impression, Shape and Size', nor any variants were ever used by any of his contacts in the ROC (pers. comm. April 2016). He recalled thinking of jizz in this connection, though he never consciously applied it in recognising aircraft. Similarly, while McDonald (1996) recorded a vague recollection of having learnt the term 'jizz' in the context of aircraft recognition as an Australian serviceman in the 1960s, he has concluded that, like Oliver, he probably conflated the birdwatching term with what he was learning about aircraft recognition (*in litt.* August 2016). Lawrence Holmes (contacted through the Royal Observer Corps Association Heritage Team) told us that: 'I was not aware of the use of the word "jizz" in ROC aircraft recognition circles' (*in litt.* July 2016). But, although exposed to methods akin to jizz-recognition, Holmes did not encounter the term being applied to aircraft. Nor did the several original members of the 2nd/3rd Australian Light Anti-Aircraft Regiment Association whom David McDonald contacted some years ago (*in litt.* August 2016). Given the weight of the otherwise entirely negative evidence, we suggest that James West's memories do not relate to widespread usage of GISS in the Royal Observer Corps or other services but to an individual or local usage.

### A claim that Coward used 'GIS'

Peter Scott (1987) recounted that Coward had explained to him that: 'he always noted down the general impression of the shape of a bird. GIS, which he pronounced "jis" – General Impression of Shape.' But in all of his writings, Coward used the spelling 'jizz', as did everyone else who wrote about it until Harvey (1985) set the GIS hare running. Furthermore, neither Coward nor any of the pre-1985 writers refer to General Impression of Shape. Scott did not refer to these earlier writings and was presumably unfamiliar with them. Any meeting between Scott and Coward must have occurred over 50 years before Scott wrote his note and we suspect that the passage of time and a desire for a rational explanation of the origin of the term

generated a false memory. In any case, Scott did not refer to any connection of General Impression of Shape with aircraft recognition, a subject with which he was surely eminently familiar – he was commander of the First Squadron of Steam Gun Boats operating in the English Channel during the Second World War.

## Comparing bird identification and aircraft recognition

MacDonald (2002) made a scholarly comparison of the identification techniques used by birdwatchers and by aircraft observers during 1930–55, when each community was developing its methods. She concluded that, to be sure of their identifications, birdwatchers relied on diagnostic features even if they used jizz for initial recognition of familiar species whereas the 'mind image' method was preferred by aircraft observers because immediate identification was always crucial for them. Yet in response to our enquiry about her view on the possible origin of 'jizz' from aircraft recognition terminology, she wrote (*in litt.* October 2015): 'I did a lot of digging about on this question… My father never used the term [GISS] and I've only ever seen it in explanations of the birdwatching term!' (She was very close to her father, who was a keen aircraft spotter – see MacDonald 2014, and fig. 5)

## The respelling of jizz

There has been a marked tendency recently, especially in North America, to take 'GISS' or sometimes 'GIS' as the standard spelling, increasingly explained as an acronym for 'General Impression, Shape and Size'. Yet while it is true that on some occasions when birdwatchers recognise birds by their jizz, this is based on general impression, shape and size, this is not true of other occasions, when the jizz that provides the recognition entails quite different features (such as movement, posture, colour and voice).

Why has 'GISS' replaced 'jizz' in some quarters? One reason may be that few people seem to be aware of the true origin of 'jizz' (Coward's Irishman). Many mistakenly believe that the term comes from aircraft recognition, so perhaps prefer the spelling 'GISS' because it fits that belief. And there is an increasing number who, even less familiar with the term's history, actually believe that GISS is an acronym for a supposed bird-recognition method 'General Impression, Shape and Size'. Because jizz does not generally boil down to these three attributes alone, this is reason enough to deplore the use of GISS.

There is another reason for the switch: 'jizz' is also used as a low colloquial synonym for semen and this clearly makes many Americans uncomfortable. Thus 'jizz' has joined that group of words that are usually acceptable in Britain but not in North America: Winter (2007) is probably not the only British bird-

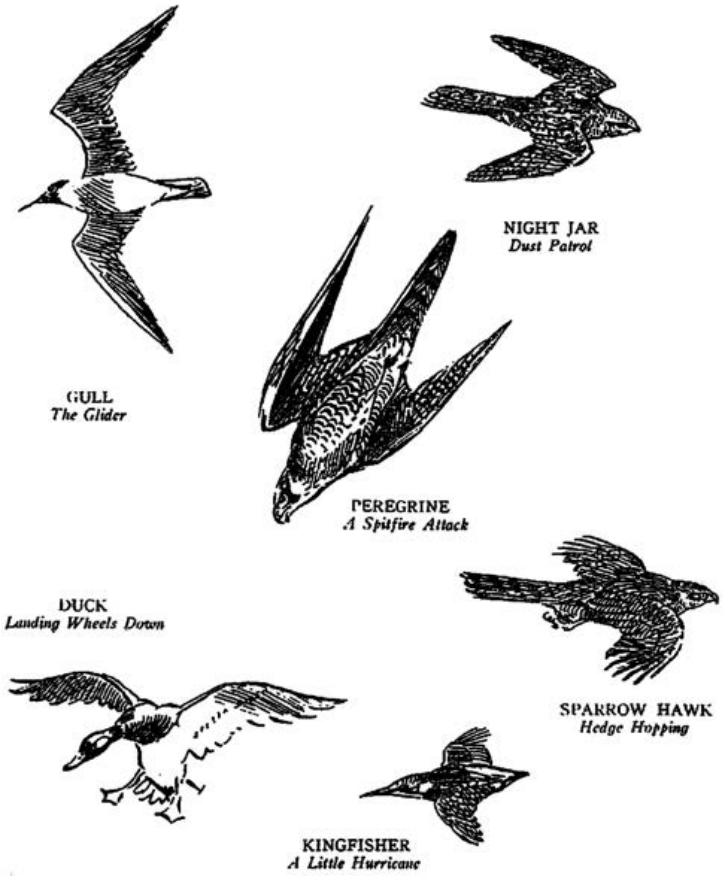


**Fig. 5.** Helen Macdonald (Macdonald 2002) recognised these drawings, 'Birds as aircraft', as one of the earliest attempts to show birds as identifiable in flight. Published in the RSPB's magazine, *Bird Notes and News*, in 1943 (Vol. XX(5), p. 74), the drawing also appeared in Bartlett (1943).

watcher who has unwittingly offended Americans by using the word.

'Gestalt' has not only been postulated as the origin of 'jizz' (see above) but has been promoted as an alternative to 'jizz' because it does not have the low colloquial connotations of the latter. Some also argue that it is better to use an existing German word than inventions such as 'jizz' and 'GISS'. We are not persuaded by such arguments. First, the idea that 'jizz' is derived etymologically from 'gestalt' has no support (see above). Second, 'gestalt' is a technical term in the psychology of perception that should not be taken over by non-specialists unless they are sure that their use of it matches the technical use – and our reading of some of the more accessible technical literature suggests it does not. Third, the usual meaning of 'gestalt' when used as an adopted English word is: 'An organised whole that is perceived as more than the sum of its parts.' Yet this is neither what Coward meant by 'jizz' nor what those who have explained jizz as a means of bird recognition in recent years have written. Sibley (2002) discussed what he considered to be the differences between jizz and gestalt in some detail. Finally, the original meaning in German is 'form' or 'shape' yet, while the jizz of some birds may rest largely on their shape, that is not generally true – if it was, the original Irishman's answer to his questioner would surely have been 'By their shape.'

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# Raptor persecution in the Peak District National Park

Tim Melling, Mark Thomas, Mike Price and Staffan Roos

Tim Melling

**188.** A Northern Goshawk *Accipiter gentilis* displaying over woodland in the Dark Peak, February 2018.

**Abstract** The Peak District National Park is the southernmost area managed for driven Red Grouse *Lagopus lagopus* shooting in England. Grouse-moor management includes intensive moorland burning and predator control by gamekeepers. As in many areas with driven grouse shooting, there is evidence that raptors are persecuted by gamekeepers. Grouse-moor management is more intense in the northern part of the National Park, known as the Dark Peak, than elsewhere. We compared the number of confirmed raptor persecution events and the area of moorland burning (as a proxy for driven grouse shooting) in 10-km squares throughout the National Park. We also compared changes in the populations of two raptor species, Northern Goshawk *Accipiter gentilis* and Peregrine Falcon *Falco peregrinus*, between 1995 and 2015. The results show a strong association between confirmed raptor persecution incidents and the area of moorland burning. Populations of Goshawks and Peregrines have declined significantly in the Dark Peak over that period, whereas they have shown 5- and 20-fold increases respectively elsewhere in the National Park. Occupancy and breeding success rates are also significantly lower in the Dark Peak. Our results demonstrate strong associations between intensive grouse-moor management, persecution of raptors and negative population impacts on both Goshawk and Peregrine in the Dark Peak; and provide further support for proposals that driven grouse-moor management should be regulated.