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Karl-Heinz Gersmann · Oliver Grimm (eds.)

Raptor and human – falconry and bird symbolism throughout the millennia on a global scale

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Raptor and human –
falconry and bird symbolism throughout the millennia on a global scale

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Karl-Heinz Gersmann and Oliver Grimm

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Cover picture: Skilled eagle master. Western Mongolia, August 2011 (photo used with the permission of Dr. Takuya Soma).

Top to the left: Seal of the Danish king Knud IV (late 11th century). Redrawing. Taken from M. Andersen/G. Tegnér, Middelalderlige segl-stamper i Norden (Roskilde 2002) 129.

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The global perspective of the book. Orange: Eurasian steppe (presumed area of origin of falconry); green: the areas considered in the book (map Jürgen Schüller, ZBSA).

Falconry definition

Falconry is defined as the taking of quarry in its natural state and habitat by means of trained birds of prey (according to the International Association for Falconry and Conservation of Birds of Prey [IAF] = www.iaf.org).

Frederick II of Hohenstaufen with a bird of prey. Miniature in his falconry book (folio 1v, Codex Pal. lat. 1071, Universitätsbibliothek Heidelberg/Biblioteca Apostolica Vaticana). Redrawing. After: Hunting in Northern Europe (Neumünster 2013) 344 fig. 1.

Frederick II of Hohenstaufen was an early global actor in the 13th century, bringing together falconers and falconry traditions from far and wide.


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Inscription on this List contributes to ensuring better visibility of the intangible cultural heritage and awareness of its significance, and to encouraging dialogue which respects cultural diversity

Date of inscription

1 December 2016

Director-General of UNESCO

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UNESCO recognition of falconry as Intangible Cultural Heritage of Humanity (cf. Hewicker in this book, Fig. 6).

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Princess of the North: perceptions of the gyrfalcon in 16th-century western Europe

By Ingrid A. R. De Smet

*Keywords: Gyrfalcon (*Falco rusticolus*), falconry/hawking, Renaissance France and Italy, the gyr in the history of science, the gyr as literary theme*

*Abstract: For centuries, European falconers considered the arctic and sub-arctic gyrfalcon (*Falco rusticolus*) an exquisite bird of prey, praised for her size and strength, her ability in the hunt, and her rarity. Whilst the Medieval gyr is now relatively well-known, less attention has been paid to the gyr in the Renaissance, especially in regions to which she is not native. Using selected ornithological and hunting treatises as well as poems and documentary sources, this paper examines the fascination with this special bird of prey in the European Renaissance, with a particular emphasis on 16th-century and early 17th-century France and Italy.*

> Il ne se trouve point de Gerfaut sinon és mains des Fauconniers des grands Seigneurs, & est un oiseau bien rare à voir.
>
> A Gyr can only be found in the hands of falconers in the service of great lords, and she is a rare bird to behold.

So wrote Guillaume Bouchet (*c.* 1513–1594) in his *Recueil des oiseaux de proye* (Bouchet 1585, 118v), closely modelling his statement on the observation made by Pierre Belon (1517–1564) in his pioneering ornithological treatise, *L'Histoire de la nature des oyseaux* of 1555 (Glardon 1997, 95–96).[1] The sentiment was echoed by the French statesman and historian Jacques Auguste de Thou (1553–1617), towards the end of the First Book of his Latin didactic poem on falconry, the *Hieracosophioy libri III*, first published in 1582–1584:

> Nec Buteonem humiles pascunt impune penates.
> Magnates hæc cura adeo, et damnosa voluptas,
> Immensique decent sumptus, regesque superbos.[2]

1 Unless otherwise indicated, all translations are my own. In line with specialist English usage, where in falconry terms the female raptor is the default, I refer to the gyrfalcon and other birds of prey as 'she', and to the tiercel as 'he'. For the male gyr specifically, I use the term gyrkin (traditionally spelt jerkin, literally 'small gyr').

2 De Smet 2013, 270. On the term *buteo* for the gyr, see below.

> It is not a humble home that can freely keep a Gyr. [For falconry] with its indulgent pleasures and immense costs, especially befits grandees and proud kings.

Indeed, for centuries, Western European falconers considered the gyrfalcon, the largest of the falcon species and currently classified as *Falco rusticolus*,[3] an exquisite bird of prey, praised for her size and strength, her ability in the hunt, and her rarity (Fig. 1). Predictably, therefore, many of the gyr's char-

*Fig. 1. A manned gyr (*Falco rusticolus*) in pursuit of a pheasant (photo courtesy of Patrick Morel).*

acteristics gave rise to speculation, from her name to her nesting sites and natural prey. On the other hand, the deployment of imported and specially trained gyrs in spectacular hunting parties inspired compelling poetic images. But, if the medieval gyr has now been relatively well studied (Van den Abeele 1994, 59–61; Oggins 2004, 12–13 and *passim*; Melani 2013), the ensuing period has been less well served: what did the Renaissance really know about this highly prized bird of prey – especially in countries to which the gyr was not indigenous? How was she used in the hunt? And what can poetic texts add to the information found in strictly technical or historical sources?[4] To answer these questions, this paper examines the fascination with this special bird of prey in the European Renaissance, with a particular emphasis on 16th-century and early 17th-century France and Italy (whose ornithological and falconry traditions are strongly interwoven). We shall first consider issues raised

3 Potapov/Sale (2005, 23) break a lance for the restoration of the scientific term *F. gyrfalco*.

4 The use of literary texts as a source for the history of falconry is a vexing question (see, e.g., Van den Abeele 1994, 148–150). Whilst exercising due regard for literary *topoi*, I shall draw here mostly on poets with close links to the court: some may at one point have practised hawking themselves, whilst others are likely to have been privileged spectators or were otherwise well-informed (see De Smet 2013, 138–159 and *passim*).

by the raptor's name and her natural environment, before moving to her use in the hunt and the moral and poetic images that she became associated with.

The gyrfalcon: a name and its pitfalls

If the historic nomenclature of birds of prey is notoriously unstable, the debate was particularly vivid in the case of the gyr. From the earliest European falconry treatises, the etymology of the first element of the predator's name, which recurs in many vernaculars (*gerfaut*; *gerfalke* or *gierfalke*; *giervalk*; *girifalco*; *gerfalcon* or *gyrfalcon*; *gerfalte*) as well as in Medieval Latin (*girfalco*, *girifalco*, *gyrofalco*), has evoked much conjecture. No doubt following an older source, the 13th-century intellectual Albertus Magnus linked the gyr's name to the later Latin *gyrare*, 'to circle', and this etymology filtered through, amongst others, into the medieval French translations of his *De falconibus* ('On Falcons') (Smets 2010, 208; 322). Emperor Frederick II of Hohenstaufen (1194–1250) provided an alternative explanation in his famous treatise *De arte venandi cum avibus* ('On the art of hunting with birds'), which was not available in print until 1596: here, the gyrfalcon's designation was traced back to the Greek terms *kyrios* ('lord') and *hieros* ('sacred'), the latter no doubt suggested by the Greek noun *hierax*, which was commonly (if mistakenly) linked to the saker (*Falco cherrug*). Both sets of explanations proved to be long-lived: directly and often indirectly, and sometimes only to be questioned, they found their way into humanist ornithological treatises such as Conrad Gessner's *Historia animalium* (1555, 67) and Ulisse Aldrovandi's *Ornithologia* (1599, 471), into dictionaries, and even the first edition of Charles d'Arcussia's relatively independent hunting tract, *La Fauconnerie* (1598, 81).[5]

As humanists attempted to reconcile vernacular testimonies and traditions about the gyr with the classification of birds in Ancient works of natural history, notably by Aristotle and Pliny, as well as medieval sources (insofar as they were still known), the Greek and Latin avian terminology similarly elicited a variety of opinions, but no satisfactory resolution was reached. Gessner, for instance, borrowed the unusual Latin term *hierofalchus* from Paolo Giovio (1483–1552), who briefly mentioned gyrfalcons in his *Libellus de legatione Basilii Magni*, a compendium of the Italian's knowledge of Moscow resulting from his reading and his conversations with the Russian diplomat Dmitrij Gerasimow who visited Rome in 1525. The Swiss ornithologist debated to what extent the name *hierofalchus* or *hierofalco* (the term used by Belisario Acquaviva, Duke of Nardò, in his *De aucupio*) could be deemed equivalent to the term *herodius*, which Giovio also used, albeit with some distinction from the gyr, but which Aristotle had reserved for a species of eagle ('the heron-killer', *HA* 9, 1, 32).[6] Gessner (1555, 66) saw a supporting argument for the equation of *hierofalchus* with *herodius* in the Italian word *agirofalco*, 'since the Italians call the heron *ag<h>irone*' ('nam Itali ardeam agironem vocant') . In contrast, Belon hazarded that the bird's French denomination might have been based on a combination of *gyps* ('vulture') and *falco*, although he immediately rejected this alternative in consideration of the cowardly nature of the *gypaëtus* ('buzzard'), which he deemed incompatible with the courageous character of the gyr (Glardon 1997, 94; cf. Fig. 2). Aldrovandi criticised both Gessner and Belon's (1599, 471–472) etymological suggestions, opting instead for the Latin term *gyrfalco*, since he firmly believed that this term and similar vernacular forms were all derivations from the German. Etymologists currently do associate *gyr-* with the German word for vulture (*gîr*), even though the birds were valued very differently (Van den Abeele 1994, 60n.). However, the idea that *gyr-* may in fact relate to another root in Old Norse (*verðr*), which already refers to the falcon's 'worth', her

5 The statement disappeared from later editions.

6 The 13th-c. encyclopedic writer Thomas of Cantimpré likewise used the term *herodius* in relation to the gyrfalcon (Van den Abeele 1994, 59).

Fig. 2. Woodcut illustration of the gyr in Pierre Belon*'s Histoire de la nature des oyseaux (1555) (Bibliotheca Falconaria K.-H. Gersmann).*

'nobility' – rather like the German *Edelfalke* – ought not to be dismissed (Weekley 1919; de Vries 1962, 161).

Be that as it may, when in the second half of the 16th century Jacques Auguste de Thou sought to impress his contemporaries (princes, scholars and poets alike) with his learned Latin poem on falconry, he could not accept a hybrid, medieval coinage such as *hierofalco* or *girifalco* for his own description of the species. Comparing Aristotle and Pliny's statements about 'the most potent bird of prey', de Thou ventured that *buteo* (ordinarily translated into French as *busard*, i.e. 'buzzard') was the correct Classical Latin term for the gyr (De Smet 2013, 394–397). The proposal is not as eccentric as one might assume, given that a similar mode of reasoning had led Belon assign the Latin term *buteo* to the saker (Glardon 1997, 109). Nonetheless, if de Thou's argument did not take hold, it does not prevent his diagnosis of the gyr from being both an informative and accomplished piece, which is worth quoting here in full (De Smet 2013, 260–262, with a new English translation):

Est et magnanima Falconum e gente Triorches
Seu Buteo: optimus hic et formosissimus ales
Accipitrum in genere, atque animis, et robore præstat.
Cum vero Autumni veteres sub tempore primum
Exuvias posuit, tum corpore pulcrior omni
Tollit ovans caput, atque erecta fronte superbit
Torva tuens, patulisque exspirat naribus ignem.
Cæruleus rostro color est, atque unguibus æque;
Et notulis passim pectus distinguitur atris.
Ille ad Hyperboreum prædas agit improbus axem,
Sauromatumque ultra fineis, extremaque Thules
Litora; fœcundos hominum volucrumque receptus,
Vaginamque olim mundi; districtus in omnem
Europen unde, et Libyen, Asiamque potentem
Fatalis mucro populosas civibus urbes
Hausit, et ipsum adeo stravit tot cædibus orbem.
Hinc dum ad nos nivium, et cæli pertæsus iniqui
Tendit, oloriferumque Albim, celeremque Visurgim,
Danubiumque supervolitat, Rhenumque bicornem,
Excipitur laqueis, magnoque heic captus habetur
In pretio. Hunc Reges mensa dignantur amica,

Et tractare manu gaudent, et voce canora
Indocileis mulcere animos invictaque corda:
Ast illi tacitam pertentant gaudia mentem
Interea: ponunt furiales pectoris æstus,
Et cedit feritas patienti victa labore.
Nil non audebit, nil non tentabit, ubi auras
Captare ætherias domino emittente licebit;
Aspice, non, quo more alii, stridentibus alis
Subvehitur, crebrosque alternat in aëre gyros:
Sed recto incedens graditur per inane volatu
Arduus, et magni conscendit sidera cæli;
Ut vero nubes inter caput extulit altas,
Præcipiti raptus lapsu ruit, et furit ardens,
Subiectamque oculis prædam deturbat ab alto:
Illa sed horrificum penna trepidante latronem
Expulsu alarum agnoscens, fugit ocyus Euro,
Obliquatque latus, non ausa obvertere rostrum,
Aut contra certare, aut cursum inhibere fugacem.

To the noble family of Falcons belongs also the *Triorches* or *Buteo* ['Gyrfalcon']: she is the finest, handsomest bird among the raptors, and stands out by her character and strength. However, when she has first shed her old plumage around the autumn, her entire body appears more beautiful; (595) she raises her head triumphantly, showing off her elongated forehead and piercing gaze, whilst breathing fire from her broad nostrils. Her beak is tinged with blue, and so are her talons, whilst her breast is sprinkled with small black marks. Wickedly, she chases her prey near the North Pole, (600) beyond the land of the Poles and the farthest coast of Thule and that fertile retreat of men and birds – the sheath of the world [Scandinavia], from where a fatal sword was drawn against Europe, Libya and the powers of Asia, draining populous cities of their residents (605) and overthrowing the world itself in carnage. When she tires of the region's snow and its unfriendly sky, she heads towards us: as she flies across the swan-proud Elbe, the fast-flowing Weser, the Danube and the double-horned Rhine, she is snared; once caught, she is valued highly here: (610) Kings invite her at their table, they take pleasure in stroking her and soften her hardy spirit and indomitable heart with soothing words. But in the meantime, the pleasant treatment cajoles her gruff disposition into abandoning her furious agitation: (615) [thus] even wildness is overcome by patient effort and yields to it. There is nothing she will not dare, nothing she will not attempt, when her master casts her off and allows her to take to the air; see, unlike the others, she does not climb with a flap of her wings, or draws continuous circles in the air; (620) but she flies straight up through the air, until she soars, rising to the heavenly stars above. Yet when her head has pierced the bank of clouds, she stoops into a precipitous rush; burning with fury, she startles the prey that she has sighted from above. (625) But the prey recognizes the terrifying feathered robber from the thrust of her wings and bolts faster than the wind; afraid to face the raptor's beak, the animal presents her with its flank, either in order to fight back, or to run away at full speed.

During the Renaissance, the origins and breeding grounds of migrating or exotic birds of prey often remained mysterious – as de Thou attests on several occasions (De Smet 2013, 242–243; 258–259; 264–265; 372–373). Our historical sources, therefore, are rife with approximation and guesswork. Errors in the identification of a species and a lax use of ornithological nomenclature only confound matters more. It is true that birds of prey may occupy or return to the same territory for centuries; in the case of *Falco rusticolus*, the radiocarbon dating of guano and feathers found in nesting sites in Greenland, where deterioration is slow, has suggested that some gyrfalcon nests were 6,000 to 6,500 years old whilst others had been used for hundreds of years (Burnham et al. 2009). But however tempting it is to imagine that a number of modern gyrs may have had eyries on the same ledges as their Renaissance forebears, ornithologists rightly warn against drawing inferences about historic bird populations from the current habitat and migration patterns of a species.

For French and indeed Italian authors of the 16th century, the gyr was emphatically an extraneous raptor: 'she does not roam over Italy or France at all' ('il ne hante point ne Italie, ne France'), stated Belon (Glardon 1997, 94) and after him Bouchet (1585, 118v). The principal falconry and ornithological treatises held that the gyr only bred in cold climates. These are mostly – but not exclusively – identified with the European North, ranging from 'the cold regions, as well as in Dacia, Norway and Prussia towards Russia' (Tardif 1492, n.p.[7]), 'the most Northern part of Germany called Norway' (Belisario 1578, 92) or 'the parts of Prussia and Denmark towards Lübeck' (Franchieres 1585, 3r), to an unspecified 'part of Russia' (Glardon 1997, 94; Bouchet 1585, 118v). They also declared, quite consistently, that the gyr was commonly trapped as a passager in Germany (Tardif 1585, 59r; Franchieres 1585, 3r), mostly in the North (Low Germany), but also toward the South (High Germany; cf. Glardon 1997, 95; Bouchet 1585, 108v). De Thou imagined the gyr's natural habitat in the arctic and sub-arctic regions ('near the North pole, beyond the land of the Poles and the farthest coast of Thule and that fertile retreat of men and birds … [Scandinavia]'), but likewise notes that she is snared when she winters in the (mostly German) river basins of the Elbe, Weser, Danube and Rhine (see the passage quoted above). Gessner and Aldrovandi similarly situate the gyr's breeding grounds in the North; however, on the basis of Belisario's *De aucupio* of 1519, both add that the Holy Roman Emperor (i.e. Maximilian I, r. 1486–1519) obtained his gyrs through merchants travelling to a cold and rough island named *Hirlandia*. Gessner mistakenly identified the island as 'a part of England', i.e. Ireland, but Belisario (1578, 92–93) undoubtedly meant Iceland, the island between Norway (*Noroegia*) and Greenland (*Gallandia*) which Frederick II had singled out as the homeland of the best gyrs in his *De arte venandi cum avibus* (Paulus/Van den Abeele 2000, 182; Frederick II 1596, 152). Still according to Belisario, the Icelandic gyrs were whiter and larger than the Norwegian ones, of which his contemporaries nonetheless thought more highly (1578, 93). Other texts, such as Francesco Sforzino da Carcano's *Tre libri de gli uccelli da rapina* (1568, 3, 26), note the different morphs of the gyr's plumage – 'biondi, rossi, bruni et bianchi' ('fair, russet, brown and white') – without linking these varieties to specific regions of origin. D'Arcussia, lastly, speaks of gyrs being trapped as passagers in Norway, and as eyasses (nestlings) in the vicinity of 'Creman' – that is, the Kerman region in Persia (current-day Iran) – as well as in Armenia. He specifies, however, that birds imported from the latter regions tend to be smaller and, in the case of Armenia, of lesser quality (d'Arcussia 1598, 82). D'Arcussia's mention of Kerman and Armenia may be based on his knowledge of the actual trade in falcons or on travel reports, or a combination of both. The smaller size and infer-

7 The mention of Russia is omitted from later editions (e.g. Tardif 1585, 59r). The reference to 'Dacie', i.e. the Balkan, is problematic. It appears to go back to a medieval French translation of *Moamin* (quoted by Van den Abeele 1994, 60n). There is probably confusion with 'Danimarca' (Denmark), which is how Franchières interprets it.

ior quality may be explained by confusion of the gyr with another species, or by naturally occurring hybridisation – a phenomenon of which d'Arcussia was well aware.[8]

Travelogues, at any rate, can be particularly equivocal. In the late 13th century, Marco Polo famously reported that Kublai Khan drew as many gyrfalcons as he wanted from islands (in the Pacific), a forty days' march east to the plain of 'Bangu' (or 'Bargu'); from there the birds were allegedly also exported to the Levant. To this day, Polo's account remains a matter of debate. For Potapov/Sale (2005, 208–209), Polo's description of Kublai Khan's hunting practices appears strongly influenced by Emperor Frederick II of Hohenstaufen's treatise. Others have related Polo's account to the documented practice in the region of gyrs being exacted as tribute (Allsen 2006, 247–248) or see in it an amalgam of personal observation and textual knowledge (Vogel 2013). What we must retain, is that from the late 15th century onwards, Polo's travel account with, amongst other things, its description of the Great Khan's hawking expeditions with eagles, gyrs and other birds of prey (Polo 1556, 55v–57v) circulated widely in print, not just in Italian (eight editions between 1496 and 1597), but also in German (1477), Latin (1483), Portuguese (1502), Spanish (seven editions from 1503 onwards), French (1556), and English (1579). It thus provided a longlasting and exceptional testimony of gyrs in these far-flung regions, which Renaissance ornithologists accepted as credible (Gessner 1555, 66; Aldrovandi 1599, 475).

Some authors claimed that the gyr nested in the Mediterranean or migrated there. In the middle of the 15th century, for example, the French herald and traveller Gilles Le Bouvier (Hamy 1908, 65) remarked that 'gyrfalcons' (*gerfaulx*) were captured on the Mediterranean island of Candia (Crete). In all likelihood, however, Le Bouvier confounded the birds (which he claimed were 'greater than falcons') with the saker (*Falco cherrug*), which was routinely trapped in these parts and is in fact often mistaken for a gyr (Potapov/Sale 2005, 79). André Thevet (1516–1590) commits a similar error in his description of Crete in his *Cosmographie universelle* of 1575. There Thevet declares that Italian nobles import their 'sakers, hawks, falcons, *gyrfalcons*, tiercels and lanners' from the Cretan mountains, where the birds seize lambs and kid goats to feed themselves or their young; at the same time, however, Thevet (1575, I, 218v) freely admits his own lack of competence in the realm of falconry. Indeed, from his own travels to the Levant, Pierre Belon (1554, 13v) had long issued a warning that unlike French falconers ('nos Faulconniers'), the Cretans did not differentiate between the various species of bird of prey, to which they referred by the general (Italian) term of *falconi*, or *hierax* in Greek.

Even when Olaus Magnus's detailed map of Scandinavia and his subsequent *Historia de gentibus septentrionalibus* (*History of the Nordic peoples*) began to unlock the shadowy regions of the North, any allusion to the gyr cannot be taken at face value. Olaus's 1539 *Carta Marina* evidently drew attention to the diverse avian fauna of the North. Nevertheless, the large bird of prey clutching a hare, depicted on the map to the North of the White Sea, was not labelled a gyr, but 'a huge eagle [that] wraps her eggs in the flayed skin of a hare; by means of its life-giving warmth the chicks are hatched' (Magnus 1539, sheet C, letter E), with a firm nod to Aristotle's description of a bird in Scythia 'that is a large as a great bustard' in his *History of Animals* (9, 1, 33). Magnus's *History*, first published in Rome in 1554/1555 but often reprinted and soon translated into Dutch, French, Italian and German, similarly describes a broad range of indigenous and migrating bird species in Book XIX. For his classification of raptors, however, Olaus is highly dependent on Albertus Magnus, as well as on the apocryphal *Letter of Aquila Symmachus and Theodotion to Ptolemy*, so that he offers little that is new. Olaus thus first mentions the gyr ('herodius qui et girfalcus dicitur') as a subspecies of the eagle (1555, 651). Puzzlingly, he later briefly returns to the gyr in his taxonomy of the *falcones*

8 Instances of likely confusion of the gyr with the saker (which also belongs to the group of 'desert falcons') follow below. On the hybridisation of gyrs, and their relation to the Altai falcons, a possible hybrid species derived from sakers and gyrs, but in any case belonging to the *Falco hierfalco* superspecies, see Potapov/Sale 2005, 24–28.

(1555, 668).[9] For our present purposes, it is worth quoting Olaus Magnus's first description of the gyr in the French version of 1561 (212^{v}–213^{r}), which omits Olaus's explicit reference to Albertus Magnus as his source ('Alberto teste') but embellishes the *History*'s original Latin version in terms of the gyr's prowess, no doubt in order to please an aristocratic French readership:

> La première [sorte d'aigle] c'êt le gerfaut, oiseau fort noble entre tous les oiseaux de proye: il êt de couleur d'azur, tendant sus le blanc, fors qu'és ailes, et à l'estomach, équels lieus il êt plus azuré qu'ailleurs. Il êt si fort qu'il combat l'aigle, et de si grand cœur et haleine, que s'il êt lâché sus demie douzaine de grues, ou autres oiseaus, il ne partira jamais, ne abandonnera la chasse jusques à ce qu'il les ait toutes jettees par terre, l'une après l'autre, là où elles sont achevees par le chien, qui êt tout duit à cela. Et si par fortune il en échappe une de la troupe, les fauconniers ont beau leurrer et crier pour le reprendre: car c'êt en vain jusques à ce qu'il ait trouvé sa proye, qui lui êt échappée. Le gerfaut n'a jamais qu'un petit.
>
> The first [type of eagle] is the gyr, a most noble bird in the whole range of birds of prey; her colour is sky-blue, leaning towards white, but for the wings and stomach, which tend to be more bluish than other parts. She is so strong as to combat the eagle, and so courageous and forceful, that when she is released on half a dozen cranes or other birds, she will never leave or abandon the hunt until she has brought them all down to the ground, one after the other, where they are finished off by a specially trained dog. And should by some mishap one of the cranes escape, then the falconers lure and call her back in vain, until she has found the prey that escaped her. The gyr only produces a single young.

In the course of the 16th century, some new information did trickle through. The *Tractatus de duabus Sarmatiis Asiana et Europiana* ('Account of the two Sarmatias, Asian and European') by Matthias Miechowita (Maciej z Miechowa, 1457–1523), for instance, yielded a glimpse of the import of Russian gyrs into early 16th-century Poland. Nonetheless, having first dispelled the myth of griffins and other gold-digging birds in the Ural region and the (Russian) North ('in Iurha et locis Septentrionis'), even Miechowita's report soon slips into the realm of fiction:

> Affertur autem ad nos avis quedam rapina vivens, quantitatis aquilae, sed alis et cauda prolixioribus quam aquila, in similitudinem accipitris et vocant eam Moskovitæ 'kizecoth', nostri vero homines vocant ipsam 'byalozor', quasi albicans splendor, quia subalba est secundum ventrem. Hanc omnes rapaces aves[,] accipitres[,] falcones, et cetere rapto viventes in tantum metuunt, quod inspecta ea tremunt, cadunt, et extinguuntur. (Miechowita 1518, no page no. [lib. I, cap. V])
>
> A certain bird of prey, however, is brought to us [from there]: she is of the size of an eagle, but her wings and tail are wider than the eagle's, more like a hawk's. The Muscovites call her 'kizecoth', but we [Poles] name her 'byalozor' [*białozór*, i.e. gyrfalcon], after her dazzling whiteness,[10] because she presents a whitish colour on her stomach. All the [other] raptors, hawks, falcons and others that live by catching prey, fear her so much that they tremble at her sight, fall, and perish.

9 Potapov/Sale (2005, 80) are correct that there is no mention of a gyr on Olaus's map, but do not discuss the references to the gyr in the *Historia*. For Bø (1962, 20), Olaus's descriptions of Nordic birds of prey 'are neither particularly original nor reliable, on both historical and contemporary conditions'; cf. Mehler et al. in this book.

10 This is a reference to the Polish word *biały*, 'light-coloured', 'white'; cf. Udolph 'Eastern Slavic' in this book.

Three decades later, the Imperial diplomat Sigmund von Herberstein (1486–1566) was aware of Miechowita's account when he shared his own observations of Russian gyrfalcons or 'kretzet' (*krechet*) in his *Rerum Moscovitarum Commentarii* ('Notes on Moscow'), a highly popular text that was also translated into Italian and German. Herberstein not only refers to the court's use of gyrfalcons in the hunt for 'swans, crane, and other birds of that ilk'; he also provides an early, foreign testimony to the transport of newly caught gyrs from their nesting grounds to Moscow, four, five or six at a time, by specially designed sleighs ('in quodam vehiculo ad hoc præparato'; cf. Herberstein 1549, 35^{v}–36^{r}).[11] Both Miechowita's and Herberstein's testimonies were carefully culled and analysed, alongside Giovio's reference to gyrfalcons in his *De legatione*, by Gessner (1555, 66–67) and Aldrovandi (1599, 471, 474–475). The medical doctor and humanist Julius Caesar Scaliger (1481–1558), an Italian expatriate living in France, likewise drew on Miechowita and Herberstein – though not quite accurately – in his famous refutation of Girolamo Cardano's *De Subtilitate*, in this particular case on the question of whether the eagle was in effect the largest of all birds (1557, 303^{r}–304^{v} = Exercitatio CCXXXI, here 303^{v}–304^{r}, 'Bialozor, Krezet, Falcones albi'). We shall return to Scaliger's text later.

It is a pity, however, that most continental men of letters did not read English, for the inquisitive minds of a de Thou or an Aldrovandi would surely have appreciated George Turberville's reference to the gyrs and other raptors he saw on his visit to Moscow in 1568. A rare gem, but without much influence, the passage is inserted in his *Booke of Faulconrie* of 1575, which is for the most part a compilation from French and Italian hawking treatises:

> At my beyng in Moscovia, I sawe sundrie Gerfalcons, verie fayre and huge hawkes, and of all other kyndes of hawkes, that onely byrde is there had in accompte and regarde, and is of greater price than any other. The reason whereof I learned of certayne Englishe Merchauntes my countrey menne, who tolde me, that the Emperours Maiestie Ivan Vazilniche [i.e. Ivan the Terrible], did use to flee the Raven with a cast of Gerfalcons, and tooke no slender pleasure and delight therein. (Turberville 1575, 43)

Turberville continues with the English merchants' account of the Tsar's 'monstrous strong' (i.e. spectacular and impressive) flight at the agile raven: on one occasion, when the prey sought to escape the gyrs' attack by hiding in a fir tree, the Tsar simply ordered his party to hack down the tree. Thus forced to take flight again, the raven was soon engaged in a new, fatal battle with the mighty gyrs. 'I imagine the flight to be very strong,' comments Turberville (1575, 43), 'and truely the pastime and pleasure cannot be small, but a game fit for such a mighty Prince as his Maiestie is.' In France, flying at ravens (with falcons) was not practised until the reign of Louis XIII; it may have been a chance development (rather than one modelled on reports from abroad) and probably did not involve gyrs.[12]

Finally, it should be mentioned that in addition to the discovery of the European North and East, the New World also potentially opened new vistas of falconry. 'La Nouvelle France' was certainly said to abound in suitable hunting birds (including the gyr):

> Si on desire la vollerie, il se trouvera dans ses lieux de toutes sortes d'oiseau de proye, et autant qu'on en peut desirer: les faucons, *gerfauts*, sacres, tiercelets, esperviers, autours, esmerillons, mouschets, de deux sortes d'aigles, hiboux petits et grands, ducs grands outre l'ordinaire, pies griesches, piverts, et autres sortes d'oyseaux de proye, […]. (Champlain 1632, 4 – emphasis mine)

11 On the trapping of Russian gyrfalcons in the Early Modern period, see Potapov 2011, 193–194, and particularly Shergalin 2011.

12 This statement is based on Charles d'Arcussia's *La Fauconnerie du Roi* ('The Royal Mews'), first published in 1626 but referring back to 1615. I refer here to John Loft's English translation based on the 1643 edition (Loft 2003, 287).

> If one fancies hawking, there are in this region all kinds of birds of prey, and in as great a quantity as one would want: falcons, *gyrs*, sakers, tiercels, sparrowhawks, goshawks, merlins, muskets [i.e. male sparrowhawks], both types of eagle, large and small owls, eagle-owls that are bigger than normal, shrikes, woodpeckers, and other types of birds of prey (*sic*).

From the arctic North to the courts of Europe

Various studies have investigated the export of raptors from the North (including, but not limited to, gyrs), both as a commercial venture and as diplomatic gifts, which often resulted in a monetary reward for the bearer or a counter-gift in kind.[13] The collation of archival sources such as the so-called 'falconry letters' (*Falkenbriefe*) and the records of the Duke of Prussia's annual distribution of falcons to the courts of Europe, as well as the gradual unlocking of the gyrfalcon trade in the East now afford us a much better understanding of this commerce than any individual in Renaissance France or Italy would have had.

In the 16th century, besides the cadges of Nordic falcons (sometimes including a gyr) sent from Prussia to the French King and one or two of the most prominent noblemen, such as the *connétable* Anne de Montmorency, gyrs were often supplied to France and even Italy via the Low Countries. In 1532, for instance, François I received a gyr and a gyrkin from Mary of Hungary, the regent of the Spanish Netherlands, whilst in 1606 Henri IV thanked Archduke Albert for his kind gift of 'two gyrs, a tiercel, and three falcons'. In return, the French King would offer hunting dogs and above all sakers from the Mediterranean, which Greek merchants imported into to France every year (De Smet 2013, 85–93). In the late 17th and 18th centuries, however, the French court dealt more directly with the King of Denmark, offering (in 1753) four thousand bottles of Champagne and Burgundy wine as compensation (Charliat 1929, 123–124).

As d'Arcussia's account suggests, some gyrfalcons may also have entered France via Mediterranean ports. In the Ottoman Empire, Süleiman the Magnificent (r. 1520–1566) certainly sent emissaries to Moscow to purchase falcons and gyrs of good quality (Veinstein 1994, 718; 721). Any gyrs he sent as diplomatic presents to France would thus have been subject to a long and circuitous route towards the mews of the French King or of *connétable* Anne de Montmorency (De Smet 2013, 92). It is not yet known what, if any, the impact was for the European West of the Russian Tsar's clampdown on his monopoly on gyrfalcons in the second quarter of the 17th century.

In mid 16th-century France, a gyr cost, according to Pierre Belon, at least 20 and more commonly 25 *écus* (Glardon 1997, 96). Based on Francesco Sforzino da Carcano's *Tre Libri de gli uccelli da rapina* of 1568, Aldrovandi stated that in Italy a gyrfalcon would fetch 50 *scudi*, even if she had not yet been manned, whilst a male of the species would cost 20 (Aldrovandi 1599, 477). The Bolognese ornithologist was, however, sceptical about Carcano's claim that merchants brought gyrfalcons to Italy from the Orient (i.e. from Cyprus, Crete, or Alexandria in Egypt), 'given that others deny that they originate from anywhere else but the very North'. But he did concur that the French were the greatest consumers of gyrfalcons, which they were willing to buy 'at any price' for use in the hunt (ibid.).

13 For broad surveys, see Ford 1999 (111–118) and Potapov/Sale 2005 (209–212). For studies with a particular historical/geographical focus and further ref., see Knabe 1962; 1967; and Heckmann 1999 (on the Duke of Prussia's annual gift of falcons to the princes of Europe), Paravicini 2003 (564–572, on falcons as a special case in a broader Medieval trade of animals from the North), Charliat 1929 (on the commerce between Denmark and France in the 17th and 18th c.), Bø 1962 (on falcon-trapping in Norway, especially from the mid-16th to the mid-18th c.) and Orten Lie and Mehler et al. in this book. For the trade with the Low Countries, see Fuks/van der Windt 2005, 143–145 (revised from Fuks/Parpoil 1994), and De Smet 2013, 90. For the gyrfalcon trade in the Far East and Russia, see the excellent survey in Allsen 2006, 248–252, and the specialist articles cited in fn. 11.

These high prices are not only confirmed by documentary evidence but also proved remarkably stable. In September 1521 the white gyr that belonged to Federico II Gonzaga, Duke of Mantua, was reported to have come out of her annual moult more white and more beautiful than before: with her splendid new plumage, Gonzaga's master of the hunt, Francesco Leali, estimated the gyr's worth at 200 ducats (Malacarne 2003, 52)![14] But this was no doubt an exaggeration, due to sheer enthusiasm, for in that same year one of Federico's falconers, Annibale Sala, purchased a gyr from 'German' merchants ('li todeschi', but perhaps referring to Dutch traders) for 20 ducats. This bird, however, was 'quite beautiful, sore in plumage, more russet than anything else' ('asai bello, soro de piumazo, più presto rosso che altro') and therefore less desirable than a white specimen (Malacarne 2003, 52). In France, François (r. 1515–1547) I is known to have paid 50 *écus* for two haggard gyrs and one sore. On 2 January 1595 Henri IV's *Conseil des finances* similarly approved a payment of 50 *écus* for 3 gyrs to be housed in the royal mews (Valois 1886–1893, I, 122, no. 1911). The same price, however, was paid for a single white gyrfalcon in December 1600 (Parpoil 1994, 128). On 31 December 1605, Henri IV paid 75 *livres* each for two fully trained gyrkins ('1 tiercelet de gerfault vollant', twice), which he bought from two different suppliers, one a Flemish merchant, the other, one of his own falconers Antoine Du Buisson (who had probably returned from a buying expedition; cf. Reille/Quiqueran Beaujeu 1989, 102; Parpoil 1994, 128).[15] Considering that one *écu* was worth three *livres*, the male gyr cost half of what the (presumably) female gyr cost in 1595, whilst the white gyr cost three times as much, reflecting her greater rarity and appeal over other forms (silver or brown). By comparison, in the same two transactions of 1605, the French king paid 45 *livres* each for 13 other manned falcons, 30 *livres* for a tiercel and 45 *livres* for a 'horn-owl' ('duc'), whose use in the hunt we shall consider below (Reille/Quiqueran Beaujeu 1989, 102).[16] Equivalent prices have been recorded for Louis XIII's purchases in 1612: 75 *livres* apiece for 12 (!) haggard gyrs and 150 *livres* each for two white gyrs (Parpoil 1994, 128).

These captive birds formed the primary basis for early scientific observation, and in the case of a gyr, such access could be quite privileged. Thus even an experienced, noble falconer such as Francesco Sforzino da Carcano concedes that some of his knowledge is based on hearsay:

> mi è stato detto, che se ne trovan anco de' bianchi schietti, begli a l'occhi piu de gl'altri, ma io non ne ho mai veduto[.] (Carcano 1568, 25)
>
> I have been told that there are also gyrs that are completely white, more beautiful to behold than all the others, but I personally have never seen one.

14 The claim of a gyr's increased beauty after the moult is common in falconry treatises. De Thou also refers to it (see the passage quoted above). The testimony quoted by Giancarlo Malacarne (2003, 52, but also 89–90: 'è mudato fiorito') from documents in the Mantuan *Archivio di Stato* seems to support this common acceptation *ex vivo*. However, a successful moult may well have been due in large part to the great care given to these precious birds, which had previously been subject to the stress of being caught and being transported over long distances – as indeed Frederick II had recognized (Paulus/Van den Abeele, 2000, 333–334).

15 The price for a rare white gyr appears similar to that of a good, strong horse for general military use, which during Henri IV's reign, cost around 137,50 *livres* (or c. 45 *écus*), although a top quality horse for the royal stables could easily fetch 300 *écus* or more. These estimates are based on Valois 1886–1893, I, 155–156, no. 2372; 156, no. 2373; 210, no. 3147; 278, no. 4223; II, 716, 1497.

16 The transcription of the receipt of payment obtained by Adrien Grosle ('exhibit 44bis') reads 'duo', which in the context is an obvious error for 'duc'. Cotgrave (1611, art. 'duc') gives the translations 'great (rough-leg'd) owle', 'horne-coot' or 'horne-owle'. It most likely concerns the European eagle-owl (*Bubo bubo*, French 'grand duc').

Fig. 3. Watercolour of the Norwegian gyr belonging to Alfonso II d'Este, Duke of Ferrara, from the zoological albums of Ulisse Aldrovandi (Bologna, University Library, U. Aldrovandi, Tavole acquallerate, vol. 001-2, ill. 005).

Fig. 4. Watercolour of a hooded gyr on a falconer's gloved fist, attributed to Arcimboldo (Vienna, Österreichische Nationalbibliothek, cod. min. 42, fol. 27 [top]).

Aldrovandi, for his part, referred explicitly to the Norwegian gyr that had belonged to Alfonso II d'Este, Duke of Ferrara (1533–1597) and served as the model for both the woodcut illustration in his *Ornithologia* (Aldrovandi 1599, 472–473; 475) as well as the beautiful watercolour that survives in one of his albums (Fig. 3). Further afield, three comparable artistic studies of gyrfalcons featured in the zoological albums owned by Emperor Rudolf II (1552–1612) at Prague: two of the drawings, both of a gyr on a falconer's fist – one hooded, the other not –, have now been attributed to the Italian painter Giuseppe Arcimboldo (1526–1593), a correspondent of Aldrovandi's (Fig. 4).[17] Art historians link these watercolours and gouaches to two 16th-century oil paintings of a similar ilk, *viz.* that of the gyr that belonged to Archduke Ferdinand II (1529–1595; cf. Vienna, Kunsthistorisches Museum, Gemäldegalerie, inv. 8293) and the privately owned *Portrait of a Gyrfalcon*, viewed from three sides, by an unidentified Lombard Master (*c.* 1540–1560; cf. Fig. 5).[18] Finally, it is worth quoting Julius Scaliger's report on the gyr owned by Charles III, Duke of Savoy (1486–1553):

17 For the attribution to Arcimboldo, see Kaufmann 2009, 132, calling attention to Arcimboldo's circular mark. Vienna, ÖNB, Cod. min. 130, fol. 8r and fol. 9r. For the attribution of the former to Arcimboldo, see Olmi/Tongiorni Tomasi 2011, 128. The name 'gyrfalcon' (*gerfaut*) listed amongst alternative bird names on a 16th-c. ornithological drawing by Isaac La Grese in collaboration with Benoît Textor and Thomas Huilier (New York Historical Society, inv. 1889.10.3.1) is a misnomer: the bird depicted is probably an osprey (Olson/Mazzitelli 2007, 498).

18 See Olmi/Tongiorni Tomasi 2011, 128 and the respective reproductions of the paintings on 130 (cat. 140) and 131 (cat. 147) (cat. listing: Ferino-Pagden 2011, 369-370). The *Portrait of a Gyrfalcon, viewed from three sides*, formerly owned by Adamo Boari (1863–1928), and since then remaining in private hands, was sold at auction by Sotheby's New York on 30 January 2014.

Fig. 5. Portrait of a Gyrfalcon, *viewed from three sides, by a Lombard Master. Private Collection (Image courtesy of Sotheby's).*

> Unum tantum vidimus Gryfalconem Caroli, ducis Sabaudiani, de cuius pugna nullam capiebamus voluptatem. Omne volantum genus sine ullo negotio deiiciebat. Nec, visa præda, rotationibus aerem superabat: sed recta aucupis manu ad avem: quæ non, ut adversus Falconem, aut Sacrum sese comparabat ad defensionem: sed sola fuga saluti consulebat. Is ille Gryfalco a Falcone, quem peregrinum vocant, nihilo nisi magnitudine differebat. (Scaliger 1557, 304[R])
>
> I have only seen the gyr of Charles, Duke of Savoy. Her manner of hunting gave me no pleasure: she brought down all kinds of fowl without any effort whatsoever. Nor did she, once she had sighted her prey, circle up into the air, but [she flew] straight from the falconer's fist towards the other bird. The latter did not prepare to defend itself, as it would against an ordinary falcon or a saker, but thought only of escaping. This particular gyr did not look very different from the so-called peregrine falcon, except for its size.

Scaliger's testimony is remarkable for the criticism he voices of the gyr's actual performance in the hunt, where she apparently gave no sport. Most of his Italian and French contemporaries, particularly those at princely courts, would thoroughly disagree, and it is to their hunting practices that we must now turn.

The gyr in the hunt: from fact to fiction

In the medieval tradition, which still reverberated in the 16th century, falconers treated the gyr (and indeed the merlin) as an *oiseau de poing* or 'hawk of the fist', just like the goshawk and sparrowhawk,

no doubt because of her tendency to fly straight at her prey from the fist (Ferrières 1560, 64v; Glardon 1997, 107). But in practice, she was associated with the *haute volerie* ('high flight') and seems to have been treated increasingly as an *oiseau de leurre* ('hawk of the lure').

The gyr demanded a lot of attention: she was said to eat three times as much as a saker (the gyrkin twice as much) and could not be left as hungry as other hunting birds. An able falconer would also take into account that the gyr's origins in cold climes not only explained her physical appearance and innate qualities such as her boldness and speed (Paulus/Van den Abeele 2000, 182; Frederick II 1596, 152), but also influenced her behaviour and health: she would throw a temper in hot weather, whilst her natural, humoral balance was either deemed excessive, causing sluggishness, or cold and dry, leaving the gyr prone to craye (constipation; cf. Belisario 1578, 93–94; d'Arcussia 1598, 83–84, 118). It is worth noting that opinions varied widely: according to the northern Italian Eugenio Raimondi (1593–*c.* 1668), gyrs were actually 'hot in nature' ('sono di natura caldi'), should be purged with tow rather than cotton, in the manner of sakers and lanners, and just like these species *should* be kept hungry. Raimondi, however, also declared he was not an expert when it came to gyrs (1626, 100).

Le Miroir de Fauconnerie by Pierre Harmont, known as Mercure, provides a useful outline of her training and optimal quarries. Like d'Arcussia, the author of this hawking treatise was a practising falconer (in the service of Henri IV), and his text, whilst reflecting some well-established practices, is relatively independent from the increasingly cross-contaminated, late medieval traditions.

> Premierement il le faut poivrer, l'assurer, & faire la teste avec un vieux chapperon, le leurrer comme le Faucon, & luy faire tuer une poulle seulement de peur de le trop eschaufer: gardez vous bien en le dressant qu'il aye une frayeur & qu'il ne se iette soubz le poing & ne fasse le tour: il est fort aisé quand il est manié comme il faut, mais s'il est rudoyé, il est bien difficile de le remettre: sa volerie est pour Milan, pour Buze & pour Heron: il est excellent & courageux en ses entreprises, & de longue haleine.
>
> Pour le Tiercelet il est encor plus chatoüilleux que le Gerfault & plus delicat: vous le pouvez faire voler pour Milan, pour Heron, pour la perdrix, pour le Chahuant, pour Courlis & pour Corneille. (Harmont 1634, 16)

> First one needs to sprinkle her with pepper [to rid her of parasites], reassure her, and make her to the hood with the aid of an old hood. She must be trained with a lure like a falcon, and made to kill just one chicken so she does not become too hot. Whilst training her, be very careful that she does not take fright and throw herself under the fist, wrapping herself around it. She is very agreeable if she is handled correctly, but if she is treated roughly, it is very hard to get her back into shape. She flies at the kite, at the buzzard, and at the heron. She is outstanding and courageous in these undertakings, and has good stamina.
>
> Insofar as the gyrkin is concerned, he is even more sensitive and delicate than the gyr: you can fly him at the kite, the heron, the partridge, the great owl, the curlew and the crow.

Interestingly, a number of the gyr's traits listed by Harmont are very similar to those experienced by modern falconers: British falconer Emma Ford (1999, 125–126) describes the gyr's susceptibility to distress, her reluctance to be hooded and the fact that she is easily bored. Harmont's list of suitable flights, on the other hand, indicates that gyrs were used to hunt a larger variety of prey than they are often associated with, *viz.* the crane, heron and kite (e.g. Ford 1999, 128).[19]

19 The custom of flying a gyr at fur, as described by Frederick II (Paulus/Van den Abeele 2000, 335–336) and practised by early 20th-c. falconers in Iran (Boyer/Planiol 1948, 124), appears not to have been very popular in the European Renaissance.

The flights varied, at any rate, according to the local fauna, the landscape, and the falconer's means. In Provence, far from the wealth and infrastructure of the royal mews and where herons were less common, d'Arcussia successfully trained his gyrs to fly at partridge (which is similar to the gyr's natural prey in the North, the ptarmigan). To get around the gyr's tendency to bate on the fist, he taught his gyrs to follow from tree to tree, and in their pursuit of the prey, they perched on thickets, as goshawks do (D'Arcussia 1598, 83; Loft 2003, 47, 270, 447). On the other hand, insofar as we can believe the poetic testimony of Etienne Jodelle's (1532–1573) lengthy (and unfinished) *Ode de la chasse* ('Ode on the hunt'), the court of Charles IX delighted the gyr's sudden and direct attack, even in the flight at the partridge:

> Qui plus est, un Sacre, un Gerfaut,
> Se dresse à ceste mesme proye,
> Qu'auparavant jetter ne faut
> Que partir leur proye on ne voye:
> Tous ces oiseaux ne bloquent pas
> Lors que les perdrix ils remettent:
> Mais tous, quand ils sont bons, les mettent
> Au pied, fondans soudain en bas. (Jodelle 1585, 279^{v})
>
> Moreover, a saker or a gyr may be trained to fly at that same type of prey [partridge] and must not be cast off until the prey is visibly put on the wing. These raptors do not hover when they have flown the partridges to the mark; but (if they are any good) they all clutch them in their talons, as they abruptly stoop.

French and Italian falconers were, on the other hand, reluctant to use the gyr for the *vol pour rivière* ('flying to the river'; cf. Raimondi 1626, 100). Albertus Magnus certainly maintained that the gyr was better deployed in the open field than near, or over, water: if flying to the brook, she might hurt herself or drown, allow the waterfowl to escape, or frighten birds away (Smets 2010, 539). Other nations did not necessarily share this reserve, witness the two gyrfalcons that were trained precisely to hunt waterfowl and sent to Henri IV by Landgrave Maurice of Hesse-Kassel. At the time, however, the King was laying siege to Rouen (December 1591–May 1592); since there was no river near enough to the camp, he had the birds retrained to fly the heron. 'To be honest', comments Pierre Harmont, who was put in charge of the gyrs, 'they flew very well to the river, but they were not quite as pleasing as falcons' (Harmont 1634, 16).

There is no doubt, however, that flying at large prey such as a heron or kite yielded much more excitement for the court. In his *Ode de la Chasse*, Jodelle gives a detailed description of the flight at the kite (1583, 280^{v}–281^{r}), which François I had brought back from Italy (De Smet 2013, 15) – this particular hunt was still popular in both Italy and France in the first quarter of the 17th century (Loft 2003, 283–284, 295–296; Raimondi 1626, 99–100; cf. Fig. 6). In Jodelle's poem, the sighting of the kite is met with loud cries, and an owl, brought to the field on purpose, is launched first to make the kite lower its flight (so that the hunting party enjoy a good view of the battle that is about to take place, but no doubt also to ensure a viable slip for the falconer).[20] Then specially trained sakers are sent to rough the prey. Last of all, it is the turn of the gyr, whose distinctive mode of hunting (descriptions

20 In his poetic description of the 'Vol pour Milan', featuring an owl, two gyrkins and a saker, Claude Gauchet specifies that the owl is furnished with a foxtail instead of jesses, for the dual purpose of attracting the kite's attention and keeping the owl low (Jullien 1879, II, 65–66). On Gauchet, see below. Pierre Belon similarly refers to such a foxtail in his comments on the deployment of a 'grand duc' in the flight at the kite (Glardon 1997, 136).

Fig. 6. A Hunting party: detail from the tapestry 'Musical Interlude' ('Intermède musical'), c. *1520, from the château de Thoisy-la-Berchère (Côte d'Or, Burgundy) (Paris, Musée de Cluny, inv. CL22856).*

of which we have already encountered in the extracts quoted from Scaliger and de Thou) is put to spectacular use in this multi-pronged assault:

> Quand ceste meslee au ciel faite
> Se perd quasi de l'œil, qu'on jette
> Apres tous autres le Gerfaut.
> L'un brave et fort, depuis le bas
> Iusqu'au plus haut de pareille aile,
> Ne de façon ne monte pas
> Que les Sacres: mais en eschelle[21]
> Roide et soudain se vient hausser
> Droit au Milan, qui par la force
> D'une seule venuë, il force
> Du haut de trois clochers[22] baisser:
> Puis hausser, et faire on luy voit

21 The author of an Italian hunting treatise, Eugenio Raimondi (1626, 100) uses a similar expression in Italian to describe the flight of gyrfalcons: 'questi montano a scala'. Arthelouche de Alagona's mid 15th-c. treatise (1585, 89r) likewise declares that the gyr 'monte par poinctes'.

22 French falconers used the notion of *clochers* or 'bell towers' to estimate the height at which a raptor or its prey was situated in the air (see Jullien 1879, 70).

Des fuites, mais en toute place
Nouvelle venuë il reçoit,
Tant qu'en fin la cheute se face
Souvent bien fort loing: Mais avant
Que commencer, dès que la proye
S'et veuë, tousiours on envoye
Quatre ou cinq piqueurs sous le vent.
Du Milan la cuisse[23] se rompt
Aussi tost que la cheute est faite,
Puis soudain la curee ils font,
Et chacun y pique, et souhaite
D'arriver premier, pour avoir
De ce Milan la queuë, pource
Que c'est le pris de telle course,
Qu'en son leurre on fait apres voir. (Jodelle 1583, 280^{v}–281^{r})

When this aerial melee risks going out of sight, after all the others, the gyr is cast off. Alone, strong and courageous, she lifts off into the sky with a winging and manner that is quite unlike the sakers'. Instead, she rises as if mounting a ladder, resolutely and suddenly – straight at the kite. With the force of her one attack, she makes the kite descend as much as the height of three bell towers, then climb up again. One sees [the kite] make several escapes, but wherever she goes, she receives a new attack, so that in the end her fall often happens quite far away. But before [the battle] begins, as soon as the prey is sighted, four or five beaters (*piqueurs*) are always sent down wind. As soon as the kite is down, her leg is torn off and the [birds] instantly get their reward. Everyone rushes towards [the scene], hoping to arrive first in order to acquire the kite's tail, which is the prize of such a run and is shown off afterwards as part of one's lure.

The most celebrated of all flights was the flight at the heron, in which the gyr was similarly deployed in combination with other birds.[24] The main difference with the kite was that the prey might not be airborne but would frequently be spotted on the ground, often near the water's edge: the heron would therefore be sprung, by means of a first volley of direct, avian attack, by banging a drum or even (as the technology developed) by firing a weapon. Belisario has left us a brief account of flights at the heron in Southern Italy at the beginning of the 16th century, whereby peregrines and sakers first pursue the prey:

Vidimus tempestate nostra peregrinos sacrosque accipitres adnitentes, ut agrones volando persequerentur, relictis agronibus venatorum vocibus altis ad eos rediisse: emissumque tandem e venatoris manu hierifalconem ita citatissimo volatu vagantem per aëra in girum, crebiori alarum percussione perspeximus, ut filo in sublimi tractum censeres; agronem ab aliis derelictam quasi ad sidera ardeam vicisse cœpisseque. (Belisario 1578, 96–97)

23 In Gauchet's 'Vol pour Milan' it is the kite's head that is used as the birds' reward (Jullien 1879, II, 71) before they are given other tidbits. D'Arcussia describes a similar practice in his *Conférence des Fauconniers* of 1626, specifying that the meat of the kite is harmful for the birds of prey (Loft 2003, 296).

24 The technique of a staggered release of hunting birds dates from the Middle Ages: Frederick II discusses the use of two or more falcons, including gyrs and sakers, to fly the crane (Paulus/Van den Abeele 2000, 386–389). De Thou describes how in the flight at the kite or heron, the hunters first slipped the small merlin – an unusual choice – followed by two (unspecified) falcons with differing modes of attack, most likely a saker and a gyr (De Smet 2013, 316–319; 514–515; cf. Fig. 7).

Fig. 7. 'Heron pursued by falcons' ('Reiher von Falken verfolgt') by the Dutch painter Jan Fyt (1611–1661) (Neuburg, Bayerische Staatsgemäldesammlungen, Staatsgalerie Flämische Barockmalerei, inv. 7424; bpk/ Bayerische Staatsgemäldesammlungen).

> In my day I have seen how peregrines and sakers exerted themselves to pursue herons in flight; called back by loud shouts, they abandoned the herons and returned to the falconers. At last, a gyr was thrown off the falconer's fist. She flew [up] so swiftly, to roam and circle the air with a frequent beat of her wings, that you would have thought she was pulled up on a string: at this starry height, so to speak, she overpowered the heron which the other birds had abandoned and bound to it.

In his poem, *Le Plaisir des champs*, first published in 1583, Claude Gauchet (*c.* 1540–1620) depicts the hunting parties he witnessed at the court of Charles IX and at the country estate of *maréchal* François de Montmorency (d. 1579), who was a keen falconer. In the fourth part, on the winter season, an entire section of 160 lines ('Le vol du héron') is dedicated to a particular flight at the heron, featuring two sakers and two gyrs – tiercels, it appears from the introduction, although the text does not insist on this any further (Jullien 1879, II, 182–190). One of these was a white gyr (or gyrkin), given to Montmorency by the King. After describing the arrival of dogs, horsemen, falconers and onlookers, all full of joyous anticipation, the poet explains that it is precisely because of the gyr's direct mode of attack – and so as not to dishearten the prey – that the heron is made to take wing and given a head start. The white gyr is unhooded and cast off first. A saker follows. In the end four predators are in the air, positioning themselves above the heron, which tries to outfly its pursuers. The poet describes in graphic detail (and a good dose of hyperbole) how one of the gyrs makes the first, audible attack:

… mais à la fin voicy
Un des gerfaults venir, qui descend tout ainsi
Que l'esclair vient d'en hault, et du grand coup qu'il donne
L'aer bien loing dans le ciel haultement en resonne.
Au choc l'oiseau se pleinct, qui sent en un moment
Redoubler sur son dos gueres moins rudement
Un autre cruel coup. Voicy le blanc approche,
Et vient de tel randon que le dard qui descoche;
Qui, d'un heurt impiteux le fuiant assaillant,
Se monstre au rencontrer si fier et si vaillant,
Que, contrainct de vomir, d'une criante gorge
Deux ou trois longs poissons mi-mourant il desgorge,
Rudement attaqué. De ce coup furieux
Chacun s'esbahissant tourne l'œuil vers les cieux,
Et vers l'oiseau vaillant, qui de vigoreuse aesle
Donne deux coups contre un; tandis, à tire d'aesle
A vau le vent fuiant, le long-bec se conduit;
Ores hault, ores bas chaque oiseau le poursuit,
Donnant l'un après l'autre. … (Jullien 1879, II, 186–187)

But in the end, see how one of the gyrs moves in and stoops just like the downward strike of lightning! The great blow she deals resounds far and wide in the sky above. The prey whimpers at the shock but at once receives a second, cruel jolt to the back that is no less hard-hitting. Now the white gyr approaches and charges as speedily as an arrow shot from a bow: she attacks the fugitive with a pitiless knock and proves so fierce and powerful in the collision, that it makes [the heron] retch and with a shriek regurgitate two or three half-dead long fishes from its throat. So rough is the assault. Astounded at this violent hit, all turn their gaze toward the sky and the intrepid bird, which with a powerful stroke of her wings delivers two hits for every one received. Meanwhile, with might of wing Long-Beak seeks to escape down-wind. Alternately flying high and low, all the birds [of prey] give chase, charging one after the other …

When the heron tries to outwit its attackers by landing and hiding in the reeds, the dogs are sent in to flush it out. A soaring gyr keeps the heron low, whilst the other birds attack it from beneath, until the gyr stoops and joins in the renewed assault, keeping the hawking party once more in delighted suspense. In a dramatic ending, prey and raptors all tumble down together (Fig. 8):

Voy-les-cy venir bas culbutants pesle-mesle,
Serrement le lians de leur serre cruelle,
Tant qu'à terre abbatu, sans force et sans pouvoir,
(Contre si fort part ne sçachant plus pourvoir)
De mille coups de bec, sans nul espoir de grace,
Entre leurs mains il perd la vie sur la place. (Jullien 1879, II, 190)

See how they come down, jostling and tangling, yet tightly binding to [the heron] with their cruel talons. So the prey falls to the ground: drained of strength and power by a thousand merciless pecks of their beaks and no longer able to withstand such forceful opposition, it loses its life right there, under their clutches.

Fig. 8. The relative sizes of the gyr and the merlin (photo courtesy of Patrick Morel).

The gyr as symbol

The falconers' near consistent praise of the gyr's superiority, audacity and persistence inspired artists and poets even when they were not strictly describing hunting scenes. Thus in the *Portrait of a Gyr-falcon*, viewed from three sides, the oak tree and beech tree on which these majestic gyrs are perched are thought to represent the princely virtues of strength and moderation (Gattringer 2008, 19): the gyr becomes a token of her noble owner. Pierre de Ronsard, in his unfinished epic poem *La Franciade* (II, ll. 1303–1310), likened the resolve in battle of the eponymous hero Francus to the determined stoop of a gyr attacking a swan. The swan would admittedly have been an unlikely prey in the actual hawking practices of 16th-century France,[25] but was no doubt chosen here for its size, to echo the disparity between Francus and his opponent, the giant Phovère:

> Francus voyant que le jour luy failloit
> Et que sa main pour neant travailloit
> Comme un Gerfaut qui de roideur se laisse
> Caler à bas ouvrant la nue espaisse
> Dessus un Cygne amusé sur le bord:
> Ainsi doublant effort dessus effort,
> Sur le grand corps s'eslance de rudesse,
> Adjoustant l'art avecques la prouësse. (Céard et al. 1994, I, 1075)

25 The swan may have been hunted in the Far and Near East. Planiol, in his treatise on falconry in the Orient, names this bird as prey for the gyr alongside the crane, with reference to the 14th-c. Arabic treatise *Qawanin al-sayyad*, but adds: 'however, to avoid the gyr taking terrible hits from the [swan's] wings, capable (it is said) of breaking a man's arm, it is advisable to sew it into a white piece of cloth – the swan, that is, not the gyr!' (Boyer/Planiol 1948, 125, my transl.). See also Herberstein's testimony, quoted above.

> Francus realised that in the failing daylight his hand but toiled in vain: and just like a gyr pierces the thickening cloud and stiffens to plummet down on a swan that idles on the river bank, so he redoubled his effort, and suddenly launched himself at the [giant's] big body, combining skill with courage.

The gyr's battle with the heron could end in disaster for the bird of prey: Medieval and Early Modern falconry manuals do indeed describe elaborate treatments for birds that have suffered trauma to the head or torso by the beak of a heron or an eagle. In visual sources, the image of a falcon and heron engaged in aerial combat is a prolific motif: often the heron is depicted in a contorted way, craning its neck backward in an effort to stab the attacking raptor with its beak,[26] which the animal was thought cunningly to hide under its wing. This peril, as one might expect, appealed to the poetic imagination and turned into a veritable *topos*. Étienne Jodelle (1585, 281), Jacques Auguste de Thou (De Smet 2013, 318–319) and Claude Gauchet describe how excited falconers watching from below would shout warnings to their falcon (usually a saker or gyr), when she is perceived to be at risk from being speared:

> … Alors un cri commence:
> *Gare ! Gare le bec !* Lors l'oiseau qui s'avance
> Et si fier vient du ciel, de toute sa vigueur
> Retient le coup forcé, destournant de roideur
> De là où le bec prest de la beste maligne
> Pointu comme un daguet s'appreste à sa ruine. (Jullien 1879, 346)

> … At that moment the shouting begins: 'Mind! Mind the beak!' Then the charging bird, which so proudly stoops from the sky, with all her might holds back her forced attack. Awkwardly, she swerves to avoid the crafty animal's ready beak, which – sharp as a dagger – is poised to cause her ruin. …

Clearly inspired by such literary and visual scenes, Claude Expilly (1561–1636), a magistrate and poet from the Dauphiné in the Southeast of France, left a long poem mourning the battlefield death of a young nobleman, Laurent de Galles, lord of Mestral. In it, Expilly uses the – real or imagined – sighting of a gyr defeated by a heron as an ominous foretelling of Galles' untimely demise during the siege of Crémieu (some 43 km east of Lyon), in February 1590:

> Je vie n'a pas long temps sur le haut de la tour
> Un Gerfaut, recognu des chasseurs d'alentour,
> Qui mainte et mainte proye avoit desja ravie;
> Je le veis eslever pour combattre la vie
> D'un Heron passager; le Heron se haussant
> Gagnoit l'air et le vent, et le Gerfaut puissant,
> Remontant au dessus dans le sein de la nuë,
> Comme un trait, comme un feu fit sur lui sa fonduë:
> Mais, ô pauvre Gerfaut! je te veis attaché
> Dans le bec du Heron sous son aisle caché:
> Le vainqueur et vaincu cheurent morts sur la terre.
> Telles sont bien souvent les fortunes de guerre:

26 On this iconographic theme, but without specific reference to the gyr or saker, see Konečný 1990.

J'aprehende l'augure, il ne faut mespriser
Jupiter, qui nous veut du futur aviser. (Expilly 1596, 9)

I saw not so long ago high upon a tower a gyrfalcon that was well known among the local huntsmen for having taken many a prey. I saw her take wing, to engage in deadly combat with a passager heron. The heron took off, up into the air and to the wind, and the mighty gyr rose into the clouds; then like an arrow, like a blaze, she stooped upon the bird: but, o poor gyr! I saw you speared by the beak hidden under the heron's wing: both victor and victim fell dead upon the earth. Such are all too often the fortunes of war: I take heed of the omen, as one ought not disdain Jove when he wishes to alert us to the future.

Expilly's gyrfalcon is a heroic victim, a sad and disconcerting symbol of the bold but fated soldier, and as such a hale *memento mori*. Indeed, beyond the specific context of Laurent de Galles' commemoration, Expilly's message is concordant with the moral warnings 'Nulla salus bello' ('There is no safety in war') or 'Exitus in dubio est' ('The outcome is uncertain'), which late 16th-century emblematists such as Joachim Camerarius the Younger (1534–1598) attached to the falcon's battle with the heron (Konečný 1990, 114–116).

The poets' emphasis, however, does not always lie on the gyr's valour or virtue. Guillaume Guéroult's *Blason des oyseaux* of 1550 includes a moralising emblem in which the gyr represents a prince or grandee who abuses his superiority. All too often, warns the poet, the little people are the victims of such an abuse of brute force:

Le Gerfaulx.

Beauté au corps[,] hardiesse en courage,
Ce sont deux dons louables grandement.
Le fier Gerfaulx ha bien cest avantage:
Que de ces deux il reçoit ornement.

L'aigle Royal il combat vifvement,
Et maintefoys le surmonte, et l'opresse.
O l'honneur deu à sa grande prouesse,
Si seulement il cherchoit ses semblables!
Mais les petits (helas) trop miserables
Le plus souvent de luy sont envahys,
Tuez meurtris en tous lieux et pays,
Quand du combat la plus grand' force est sienne.

Helas tousiours ceste playe ancienne
De plus en plus acquiert accoustumance:
C'est qu'aux petits les plus gros font nuysance. (Guéroult 1550, 44)

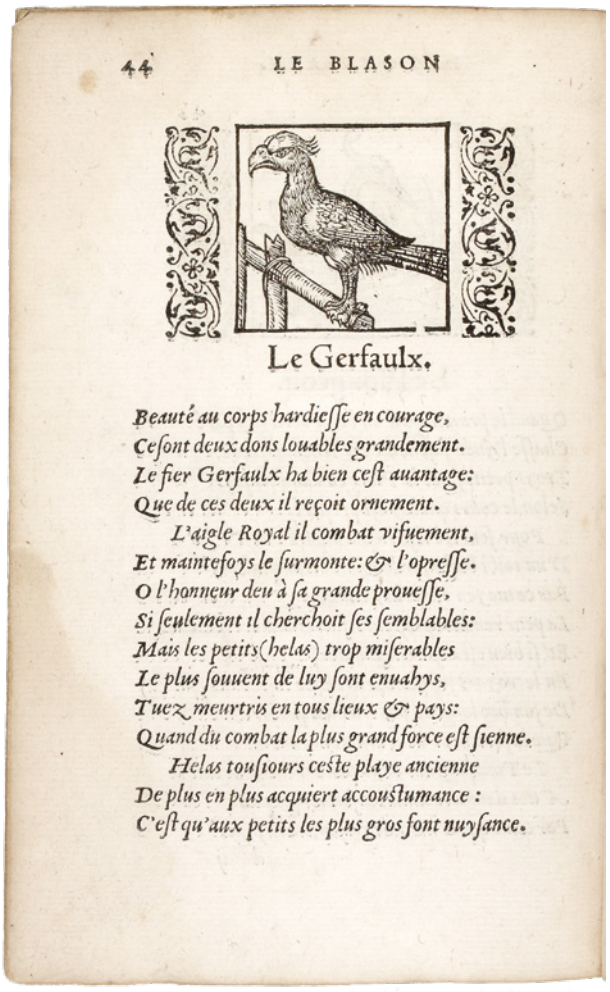
The Gyrfalcon.

Physical beauty and bold courage are two, greatly laudable gifts: the haughty gyr has this very advantage, of being graced with both.
Vigorously she attacks the golden eagle, and often she soars higher and brings her down.
O what honour her great prowess would bring, if only she sought out her equals!

> But alas, most often she attacks, slays and murders her all too wretched underlings, in any place or country, when the greater battle force is on her side. Alas! To this day this timeworn scourge is becoming evermore commonplace: that is, that the high and mighty harm the little man.

The poem and its rather crude illustration of a gyr on a perch (Fig. 9) do not betray any first-hand knowledge of the gyr. Instead, the emblem relies on the persistent medieval traditions that gave rise to a received idea of the gyr's capacity for making any other bird, including the eagle, quake and flee in fear.

Notwithstanding Guéroult's rather negative take on the gyr, the high-flying raptor provided an increasingly common analogy to praise exceptional achievement. The humanist, historian and translator Blaise de Vigenère (1523–1596) seemed particularly fond of the notion and applied it no less than three times to the poets of his time, who embellished and elevated the French language. First, in a passage reflecting on appropriate styles of writing, he contrasts his own, lower and heavier prose style to the loftier achievements of the poets of the Pléiade in general:


44 LE BLASON

Le Gerfaulx.

Beauté au corps hardieſſe en courage,
Ceſont deux dons louables grandement.
Le fier Gerfaulx ha bien ceſt auantage:
Que de ces deux il reçoit ornement.
L'aigle Royal il combat vifuement,
Et maintefoys le ſurmonte: & l'opreſſe.
O l'honneur deu à ſa grande proueſſe,
Si ſeulement il cherchoit ſes ſemblables:
Mais les petits (helas) trop miſerables
Le plus ſouuent de luy ſont enuahys,
Tuez meurtris en tous lieux & pays:
Quand du combat la plus grand force eſt ſienne.
Helas touſiours ceſte playe ancienne
De plus en plus acquiert accouſtumance:
C'eſt qu'aux petits les plus gros ſont nuyſance.

Fig. 9. 'The Gyr' in Guillaume Guéroult's Blason des oyseaux *(1550; cf. Paris, Bibliothèque nationale de France).*

> … iusques icy nous n'avons fait maniere de dire, que hascher à tire d'esle, et encore assez pesamment rez à rez de terre; là où les bons poëtes de nostre temps s'en sont allez, au moins les bons, à guise de quelque Gerfaut ou Faucon peregrin se perdre là haut dans le ciel d'une tres-heureuse hardiesse … (Vigenère 1578, 289[v])

> … up to this point we have only managed to cut through the air (in a manner of speaking), winging rather heavily and close to the ground, whilst the good poets of our time, at least the better ones, have soared, to lose themselves, like some gyrfalcon or peregrine, high up in the sky with felicitous boldness …

Elsewhere, he singles out Ronsard, who for his knowledge of Greek, Latin, Italian and Spanish 'has soared like a gyr over some tiercel goshawk' ('Ronsard […] s'est eslevé comme un gerfault par dessus quelque tiercelet d'autour'; cf. Vigenère 1589, 101). Last but not least, he expands on his original simile in the prologue to his translation of Torquato Tasso's *Gerusalemme liberata*. Here, Vigenère once more compares poets to 'a sore gyrfalcon who when cast off loses herself high in the air with just two beats of her wings' ('comme un gerfault sor, qui au partir du poing en deux tour d'esle se va perdre en hault dans le ciel'). Prose writing, on the other hand, resembles the tiered, zigzagging flight of old, bangling sakers (six times intermewed) that are used to harass the quarry on the wing

('quelque[s] vieils estomisseurs de sacres de cinq ou six mues') but have more endurance than the gyr and are able to stay in the air for longer (Vigenère 1595, ĩ iiij^{R}). Whilst particularly apt to an age and society where falconry was a fashionable pastime, the image of the gyr as the principal bird of prey, outdoing all the others, still persists: to this day, French writers and journalists use the term *les gerfauts* metaphorically, to refer to the leading figures of a movement, party or association.

Conclusion

The Latin and vernacular testimonies about the gyr in 16th and early 17th-century France and Italy that we have surveyed do not constitute an exhaustive inventory. Broad-ranging as they are, however, they demonstrate a marked shift in attitude towards the gyr and other birds of prey, especially from the middle of the 16th century onwards: whilst Medieval hunting treatises and natural histories were still being reprinted and read, their word on the gyr was not taken for granted, as falconers and scholars alike began systematically to weigh the traditional body of knowledge against statements from Ancient authors and newly anthologised reports about gyrs in the far North and Russia, as well as their own observations (of which Belisario has provided an early example). It is true that close experience of a gyr remained the prerogative of a select few, and that observations of the raptor's physique, flight, and hunting habits were not conducted in the bird's natural environment. However, the seed for a scientific approach to the gyr was evidently not planted by Jan Jonston or Carl Linnaeus; it began with the likes of Belon, Gessner and Aldrovandi. This development had its counterpart in poetry from the second half of the 16th century onwards: the blunt moralisation of a Guéroult was no match for the painstaking hunting-related poetry by the likes of Jodelle, Ronsard, de Thou and Gauchet, who savoured the jargon and technicalities of hawking and on occasion have preserved details that cannot be found elsewhere. Handled carefully, such texts usefully complement the period's ornithological diagnoses. Above all, it is thanks to to their vivid evocations of flights at the heron, kite or partridge that we can now imagine how the audacious yet majestic Nordic gyr took wing over the foreign fields of Renaissance France and Italy.

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