

The contested aesthetics of farmed animals: visual and genetic views of the body

Lewis Holloway

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Introduction

Farmed animals have long been the subject of aesthetic appreciation. They are valued for their particular contribution to the aesthetics of agricultural landscapes and can act as important visual signifiers of geographical locality (Evans and Yarwood 1995). In these ways farmed animals may be seen as contributing to the formation of a longstanding romantic or pastoral gaze upon rural or farmed landscapes, a gaze associated with notions of the rural idyll which structure many visitors' appreciation of the countryside (Urry 1990, 1995). For those actually involved in agriculture, as livestock breeders and farmers, the visual evaluation of farmed animals in the particular sites and spaces of the farm has further layers of interest and intricacy centring around a persistent tension: that within the particularly embodied, biological practices of livestock breeding, there is a constant and complex interplay and relationship between these animals' functionality and aesthetic appeal. Although anyone might experience an aesthetic response to a farmed animal, it is the particularly intense engagements with them experienced by breeders that produce the situated aesthetic encounters with and knowledges of them that interest us in this chapter.

We explore these encounters and knowledges by drawing on detailed qualitative research with UK breeders of a variety of breeds of beef cattle and sheep, and with the breed societies which promote their particular breeds and define the often aesthetically-dominant qualities which are expected in individual animals. The research aimed to examine the effects of the introduction of genetic techniques including Estimated Breeding Values (EBVs) and genetic markers for evaluating the quality or breeding 'potential' of farmed animals, focusing on how breeders' 'traditional' knowledge-practices, which drew heavily on visual evaluation of animals, were changing as a result (see Holloway 2005, Holloway and Morris 2008, Morris and Holloway 2009, 2013; Holloway et al. 2009, 2011, Holloway and Morris 2012). In-depth research was conducted with representatives of eleven sheep and ten beef cattle breed societies between May and July 2008. In the majority of cases these representatives were also breeders themselves. Interviews were also conducted with 25 further sheep and beef cattle breeders; where possible video recordings were made of breeders discussing their animals alongside the animals in fields or barns. Throughout, we focused on discussing breeding decisions, evaluation of individual animals and herds/flocks of animals, use (or not) of genetic techniques, and evolving relationships between genetic and more 'traditional' visual modes of assessing animals. Genetic techniques are often presented as superseding traditions of visual

assessment of animal bodies, replacing a practical aesthetic sense of the whole animal with 'objective' statistical measurements of commercially valuable traits. Yet, the research suggested that the replacement of aesthetic appraisal by genetic evaluation was not simple, uncontested or inevitable. Instead, complex entanglements of visual and genetic knowledge-practices were emerging, in quite different ways in different circumstances, and there was a strong sense of the persistence of an aesthetic appreciation of animals' bodily forms, expressive qualities and movements.

From here, the chapter first briefly outlines discussions of historical practices of livestock breeding, and the evident tensions between function and (particular senses of) beauty. We conceptualise our empirical research by drawing on our previous use of Foucault's conception of biopower (e.g. Foucault 1990, 2003, 2007), bringing it into theoretical relationship with a sense of the aesthetic appreciation of farmed animals. We then turn to our empirical research, focusing first, on setting out some of the layers of a 'practical aesthetic' register for evaluating beef cattle and sheep, and second, on what happens when the visual, or aesthetic, appreciation of animal bodies meets ostensibly very different, genetic, modes of evaluation. In conclusion, we emphasise the continuing significance of a practical aesthetic mode of livestock evaluation, even as it enters into more recently emerging relationships with genetic evaluation. We suggest, drawing on our Foucauldian conceptual framework, that this demonstrates the different 'truths' about livestock quality are produced by different authoritative institutions, and that this implies changes in what livestock breeders are expected to know and do in relation to their animals.

Function and beauty in livestock breeding

Several authors have discussed the historical persistence of tensions between an aesthetic evaluation of farmed animals and the demand for evaluative criteria which are production-oriented, for example in terms of the amount or quality of meat and milk animals produce (see Holloway 2005). During the eighteenth and nineteenth centuries in the UK, for example, pedigree livestock breeding emerged as a particular set of practices associated with breeders' desires to 'improve' their animals and to establish named and recognisable 'breeds' that embodied particular, often visual but also productive, characteristics. Yet, there were well-documented debates between those who bred for 'the fancy', as it was termed, and commercially-oriented farmers who were often dismissive of the visual traits admired by (often wealthy and/or aristocratic) pedigree breeders (Derry 2003, Hudson 1972, Walton 1999, Ritvo 1987, 2010). For breeders of 'fancy' livestock, an aesthetic mode of evaluation became prevalent. The nineteenth century commentator James Dickson (1835-36, cited in Ritvo 1987: 56) expresses this perspective in writing of some cattle as 'irresistably attractive ... the exquisitely symmetrical form of the body ... bedecked with a skin of the richest hues ... ornamented with a small head [and] prominent mildly beaming eyes'. Ritvo herself writes that such animals became 'embodiments of beauty and elegance' (1987: 56), while for elite breeders, 'fancy' cattle could be 'valued as precious jewels, and the animals were bought and sold with that market in mind' (Derry 2003: 21). As Walton (1999) suggests, a focus on beauty often came at the cost of productive traits, and this could be associated with a politics of social status which divided elite breeders from mundane agricultural practice. As he puts it, 'fashion or fancy gained more than a toehold in the cattle trade because a sufficiently

large number of breeders were sufficiently unconcerned about productivity performance to create a substantial market for pedigree stock based on fashion or fancy alone' (1986: 155).

And yet, the relationship between aesthetic value and functionality can be more complex, and not simply polarised. Functionality might thus inform aesthetic sensibility. Mirroring Brady's (2006) argument that an aesthetic appreciation of agricultural landscapes derives in part from an understanding of the human crafting of those landscapes, aesthetic appreciation of farmed animals' functionality might thus be (again, at least in part) related to the human 'creative' or 'crafting' processes which have led to the domestic animal in front of us. Returning to the nineteenth century, Derry (2003: 14) refers to this in her argument that livestock breeders could see 'their work as creative, and they often explained the success of certain breeders in terms of their artistic vision'. Brady argues that 'domesticated animal breeds are clearly bred to meet both aesthetic and functional aims, and some animals have strong elements of "design" through selective breeding ...' (2009: 5). But in addition to the claim that breeding can have aesthetic aims, we suggest that the aesthetic evaluation of an animal is also in part a *product* of breeding for function, so that how farmed animals are aesthetically appreciated emerges in part from or is structured by a functionalist sensibility. A practical aesthetic sensibility is thus associated with the visual assessment of farmed animals' 'quality', and with an apprehension of human ingenuity and mastery of domestic animals which is performed and celebrated at events such as agricultural shows (Anderson 2003, Holloway 2005).

The accounts of 'fancy' breeding discussed above indicate that definitions of aesthetic attractiveness in livestock can vary and be contested, but that at any time a shared (if not universal) agreement about what is attractive emerges. This is true of other fields of aesthetic judgement too: a visual, aesthetic evaluation is reliant on sensibilities and knowledges presumed to be shared between those involved in commenting on and judging particular things. Rogoff (1998:17) characterises this in terms highly resonant of the language used to describe looking at livestock, as the development of 'the good eye', a phrase Rose (2001: 54) suggests implies 'a way of looking ... that is not methodologically explicit but which nevertheless produces a specific way of describing', and which ascribes to viewers who possess it an ability to make judgements of the relative quality of what is being viewed. Hart (1979: 105), writing for a farming readership about livestock breeding and showing, confirms this rather elusive sense of a visual connoisseurship in writing that show judges 'must have "an eye for an animal" ... and know the difference between real quality and show condition'.

One way of approaching this idea of an evolving shared agreement about what is aesthetically pleasing in livestock is to consider it as an emergent truth concerning judgements about animals, a truth which is associated with an assumed authority possessed by some to make relative evaluations. We draw here on Rabinow and Rose's (2006) interpretation of Foucault's (1990, 2003, 2007) discussion of biopower as it emerged in late eighteenth century Western Europe (for more detail see Holloway et al, 2009; Holloway and Morris, 2012). 'Biopower' refers to ways of fostering the life of individuals and populations in a quest to optimise their productive capacities. In their attempt to provide analytical tools for assessing particular

moments of biopower, Rabinow and Rose (2006) argue that there are three key axes to consider. The first is the construction of *truths* about life, tied to individuals or institutions constituted as authorities able to speak such truths. The second is the development of *interventions* designed to foster the life of individuals and populations, to guide its (re)production in particular directions. The third is *subjectification*, the production of individual human subjects whose thoughts and actions are aligned with truth, and who thus act in accordance with, and in doing so reproduce, truth. While Foucault's work focused on the fostering of human life, elsewhere (Holloway et al. 2009, Holloway and Morris 2012), we have developed an approach to biopower which goes beyond a focus on the fostering of *human* life to become a more heterogeneous conceptualisation which accounts for the co-fostering of human *and farmed animal* life. We draw explicitly on Rabinow and Rose's conception of biopower in the analysis which follows. Our argument is that truths concerning the life of farmed animals (as individuals and populations) produce particular sorts of intervention in these lives, associated with the subjectification of breeders so that they are more likely to act in accordance with such truths.

In relation to the aesthetics of livestock breeding then, we can suggest that truths about evaluations of animals become established as particular authorities make judgements concerning what is good, aesthetically, about individual animals. The relevant authorities in this case might have been elite breeders in the nineteenth century, but are more likely to be established breed societies in the contemporary period. Interventions here consist in making breeding decisions which at least in part take into account the desired appearance of future individual offspring and the breed population as a whole. Breeders themselves can be regarded as having been subjectified in the ways that they have learned about and experienced livestock breeding: for example by watching an authoritative judge at a livestock show comment on and discriminate between different animals on the basis of visual criteria which encapsulate the concept of practical aesthetics mentioned above.

Yet at the same time the power to speak truth, to intervene and to make subjects who will (literally) reproduce truth in the bodies of their animals, does not go unchallenged. In the case of livestock breeding, for example, we can identify alternative truths, authorities, interventions and subjectifications associated with more recently emerging *genetic*, rather than 'traditional' visual, truths. This process of contestation points to the arbitrariness and fluidity of the truths surrounding how best to judge the quality of beef cattle and sheep.

The practical aesthetics of evaluating beef cattle and sheep

In this section we outline some of the ways in which interviewees make sense, visually, of the quality of their animals. We begin by briefly drawing on evidence from some of our video recordings of breeders discussing their animals in the spaces of the field or barn, to emphasise the importance of visual assessment of animals and to begin to reveal what is being looked at and for. We return to the idea of stockmanship here to refer to a particular combination of knowledge and practice. Next, again emphasising the practising of stockmanship, we explore some of the ways that animals are discussed, and present this in terms of what we have referred to as a practical aesthetic sensibility. Finally in this section we look at how particular ways of seeing become institutionalised through formal inspection processes.

Video recording captured the performance of stockmanship in the field or barn, as breeders discussed their animals. Just looking, was essential to this practice. The practising of stockmanship in these moments was associated with breeders' emergent subjectification as stockmen who, in visually evaluating 'real' animals, had the necessary connoisseurship. In one video recording, a breeder of Limousin cattle provided a rather prosaic description of a good young bull while leaning on a gate in his barn, saying that it had 'plenty of hindquarter, loin, length, clean-bellied'. Then, after a quiet and extended period of just looking over the gate at the animal, he added 'but some people can't see it ... sometimes people just see an animal and, you know ...'. His comment trailed away in the suggestion that for those who can't 'see', evaluating an animal is not possible.

This perspective was mirrored by the words of a sheep breeder, who spent time watching a large flock of (to us, indistinguishable) sheep moving around a field. Again after a period of just looking and pointing at animals, he said of one sheep, 'that's what I like'. The sense is obtained from this of an eye particularly attuned to the subtle visual clues provided by this animal's body and movement, contributing to an assessment of its quality as far as the breeder is concerned.

Going into a bit more detail, another cattle breeder discussed his breeding decisions while viewing a group of cows and a bull together in his yard. This moment emphasised the visual assessment of different animals in relation to each other and to other animals not actually present in the yard. What is actually seen, and what is known about these different animals is difficult to capture in what was actually said, and is perhaps not fully representable in language anyway. But yet the breeder's comments suggest something of how his looking ('in my eyes') and a practical aesthetic judgement informs breeding practices.

This cow here ... in my eyes, she's one hell of a cow, but she's, if anything, with my type of bull on her you get a lovely calf ... That's really my type of cow but you want a little bit different type of bull on it. You'd stand a stretchier, not an extreme type, of bull on her ... [She's] a good cow to look at, but there's something about her that doesn't do, she'll only have a good average calf.

The term 'type' as used here is a common word used by breeders and breed societies to sum up the characteristics of an entire animal. Similarly, the notion of an animal 'doing' is commonly used to suggest something of how it performs in terms of productivity, whether that is in gaining weight, producing milk or rearing its young: an animal may 'do well', or not.

What we take from this evidence, and it is supported by our wider experience of spending time with breeders and their animals, is the simple importance of looking, and looking, and looking, at animals. These animals are visually weighed up as individuals and, constantly, relationally. First, in relation to one another (for example in looking at a group of cows or young bulls and making direct comparison); second, in relation to potential breeding partners (in terms of thinking which bull and which cow, for example, to mate together); and third, in relation to an ideal future generation of animals. But further, what is emphasised, is that this looking is a specialist practice – 'some people can't see it'. A key concept here, and one we've

referred to before, is that of the 'stockman's eye'. This (gendered) term is used to suggest a specialist, tacit, experiential visual knowledge of animals. It is implied that this visual knowledge, whether it is innate or acquired, is necessary for livestock breeding. Those who *can* 'see it' are thus able to perceive certain practical-aesthetic truths about animals and to make the required breeding interventions to ensure future generations of animals that can be conceived of as embodying those truths. Subjectification, as in *learning* to be able to see in this way, is something that occurs via a long term immersion in the cultures and practices of livestock breeding. There is also a sense here, however, of visual knowledge only being part of the story. The final comment hints at this in the breeder's knowing that the cow which is good to look at will only produce an average, rather than an excellent, calf. As Ritvo (2010) argues, not everything is amenable to visual apprehension, and the breeding potential of an animal might also be known from other perspectives such as its pedigree (and, as we see below, via genetic techniques).

Turning to data from interviews with breeders and breed society representatives reveals a wider lexicon for visually describing animals. In recounting how they look at animals as a way of evaluating them, for example, breeders said that they found certain animals 'striking' or 'arresting', that they possessed 'beauty' or purity. Discussing his appraisal of sheep in a show ring, a special site for the performance of visual evaluation, a breeder referred to those special animals that, when observed, have an 'absolute power' in how they grab the attention, and said that such animals tend to go on to sell for high prices. Again, the 'stockman's eye' is a key concept. As the following comments from a cattle breeder suggests, acquiring this is part of the subjectification of the stockperson.

... the way that stockpeople are in the UK, especially up here, especially in Scotland, they pride themselves on being the stockman. It's still the eye, even the younger generation, there is still something we've all learned since we were kids. You're born, you're brought up on a farm, you go to bull sales, you go to sheep sales ...

The 'stockman's eye' is clearly something possessed by an individual, yet it exists in part through their association with a second, more institutionalised notion in the visual appreciation of farmed animals, which is 'breed standard' or 'breed character', a quality often described in aesthetic terms. The concept of breed standard has emerged as a way of distinguishing a particular breed, and for many breed societies has become part of a formal, written definition of what an ideal representative animal of a particular breed should look like. It is thus part of the establishment of the 'truth' of the existence and 'special' characteristics of a breed on the part of an authority (the breed society). It is a truth which is performed, for example, in the sites of the show ring and auction market. That such a truth needs to be established through the work of the society is evidence that breeds are in many ways material-semiotic constructions rather than naturally-occurring categories, emerging from several centuries of regulated breeding and close recording of family relationships, and exclusions of those animals which do not fit the required standard.

Yet breeds need to be defined, secured and policed in order to protect the value that inheres in the status of the 'pedigree animal' registered as a legitimate, 'pure' member of the breed society's herd- or flock book. How animals' visual appearance

is described is thus crucial as it provides a shorthand for establishing breed membership. But yet such descriptions can be quite subjective, reliant on generic terms such as a cow's 'femininity' or a ram's 'masculinity'. A more overtly aesthetic dimension is also commonly present in the way that a 'good animal' becomes defined. In many breeds a key part of this is simply colour, with correct colouration being essential in marking the animal as a legitimate member of a breed and those that deviate being excluded from membership. As one breed society representative said, 'If there is any visual sign that doesn't look like a [breed name], for example if it's got white on its face or something like that, then they aren't allowed in ... anything that is a bit untoward, then it is not worth the risk really'. Again, here, this sense of something being vaguely 'untoward' expresses the nature of an aesthetic judgement that is tacit, not amenable to expression in language.

However, the aesthetic notion of breed character goes beyond colour to include a wider bodily apprehension of the animal. The example below illustrates. This description of breed type was made in relation to a sheep breed. The breeder said that,

... you want this big muscle, well big muscle is there commercially for a larger intake of food etc, a big nostril to let air into its lungs, and they want, which is probably fashion now, a flattish head ... and very good hair. There is an association between good hair and good milking ability, that's what the breeders tend to think, so they want nice shiny, silky hair, and the horn must come out from the head, so it is not going to do any damage [...] But I mean anybody that is not involved in the breed would be very surprised when going to a top sale, when they see one that might make twenty thousand and one might make five hundred pounds, and don't see much difference between them. But to the breeder, the breeder is looking into a lot of the background of the sheep, and also this very special bit of breed character, that is going to make it a lot of money.

In this comment, there are clear associations drawn between some of the desired visual characteristics (alongside other sensual and haptic qualities which suggest an emergent multi-dimensional aesthetic sensitivity towards animals) and practical qualities, producing a mode of practical aesthetic evaluation of individual animals tied to commercial farming demands. It is worth noting here too the reference to fashionability, suggestive of how the way truth is constructed in relation to these sheep varies over time, and implying the continual subjectification of breeders with regards to how and what they see in their animals. This is confirmed in a comment from the representative of another sheep breed society, who said that,

If you see a picture of the [breed name] at the Highland Show seventy years ago, it is markedly different from one today. Now that has happened purely on selection of visual criteria for the market place. We, back in the fifties, men wanted the [breed name] to have bigger ears, because when you put a pen of lambs in the ring and they've got their ears up and they are looking bright and alert, they make more money than lambs with their ears down here, and that was why the ear was developed on the [breed name].

What is desired in terms of breed 'character', something with a strongly aesthetic dimension, is thus variable, requiring that breeding interventions take on different inflections in the search for what is seen as a 'good animal' (Morris and Holloway 2013). Finally here, the breeder again emphasises that to the 'outsider', the sheep appear similar, yet to those with the practised eye, the right 'character' can add

significant financial value to an animal when combined with the right pedigree 'background'.

An emergent practical aesthetics is similarly evident in other examples. The following comment from a beef cattle society representative hints at a sense of aesthetic balance and unity in the body of the good animal.

You want an animal that is a complete animal. You don't want a bit of this one and bit of that one ... I mean, it all goes together to make one. You want the animal to hold itself together nicely in a nice shape.

And in the next comment, a different beef cattle society representative emphasises the relational nature of practical aesthetic judgements in discussing how selecting a bull takes into account the intention of producing 'perfect' future generations from the particular cows with which he will be bred.

... in most pedigree breeders there's a drive, you are looking for something ... you want to have a physical appearance of the breed character and the continuity [across generations] ... I mean the [breed] head is so distinct. The [breed] head, with the polled head and with this sort of thing, you are looking for that head, you're looking for a big body, good conformation, good legs, good locomotion, good hair, good everything, all these little things. You tend to have to buy in bits and pieces, you know, you've got to get the perfect animal and you've got to look at your females at home and think, well, I need to buy something that fits to give me that.

Here again there is a sense of an emergent practical aesthetic which consists of an appraisal of a number of distinct, subjectively assessed but corporeal features (conformation, hair, legs etc) along with judgement against a more abstract, but nevertheless embodied, notion of breed character and distinctiveness.

The final point that we want to make in this section relates to the formalised processes of inspection that many breed societies have, and which act to cement the sorts of qualities mentioned in the comment above into the breed as a distinctive assemblage of animals. Inspection also, however, includes a practical-aesthetic assessment of the animal's overall visual presence (referred to often as cosmetics), judged against an ideal of breed character established in breed society documentation. Inspection is used to make decisions about which animals can be formally included as members of a breed, and which can thus become the parents of future generations. The example here comes from the representative of a sheep breed society.

We have a proper ram inspection and we have a serious ram inspector who goes around the country and fails a lot of rams. They are selected on conformation, of course, structure, cosmetics, all sorts of things ... there are only so many that can be said to be, you know, a proper [breed name] ram. Now, there'll be lots of people who have perfectly respectable looking rams, but they will be mismarked or they'll have slight dips behind the shoulder, or perhaps the teeth aren't quite right, or whatever ...

Our argument here is that truth and authority is reproduced through these inspection processes, crucially affecting both breeding interventions (i.e. the selection of animals for breeding) and the subjectification of breeders as they are encouraged to select for or against particular characteristics. The breeder's 'eye' is formed in part

through these processes of inspection, in terms of learning how to see, appreciate and evaluate a particular practical aesthetic in the animals being judged. Although this visual truth does change, as acknowledged in references to fashion for example, the authority of the breed society to establish particular truths about animals is continually confirmed through the rounds of inspection, judgement and selection (and deselection, see Holloway et al. 2011) which in turn (re)produce the corporeal 'truth' of the breed in the bodies of each generation of animals.

Aesthetic, commercial and genetic evaluation: tensions in looking

In this second empirical section, we briefly turn our attention to two sources of tension pertaining to the practical-aesthetic mode of evaluating livestock. First, as we mentioned earlier in the chapter, tensions persist between aesthetic evaluation (still seen as the pursuit of fancy or fashion) and purely commercial considerations, despite how, as we saw above, for many breeders there are actually associations between aesthetics and commercial characteristics, hence our use of the term 'practical aesthetics'. Second, and related, there are more recently emerging tensions between visual assessment and genetic evaluation techniques such as EBVs. EBVs are a form of 'classical' genetics, based on sets of measurements taken from animal bodies (e.g. their weight and muscle depth at particular ages) and on the genetic relationships between animals and their relatives. They can be used to estimate the quality of the future offspring of particular matings (Holloway 2005).

Our interviews with contemporary livestock breeders produced comments which resonated with the arguments made by Walton (1999), Ritvo (1987) and Derry (2003) concerning the tension between visual and commercial considerations during the eighteenth and nineteenth centuries. The following comments, each made by a different sheep breed society representative, illustrate how this tension is being played out.

But this is the argument within the industry of showing ... [name] for years has been saying that you should throw away the show ring because you are analysing the wrong things, you're looking for beauty rather than production.

We feel that a lot of the things that you select for showing purposes are irrelevant, and sometimes contradictory to commercial needs ... we select on horns, for the colour of their nose or the size of their ears and things that are not relevant at all, but it is very important in the show ring.

... up until the mid nineties, I suppose, the [breed name], certainly the show [breed name] was going for power, bigger boned, stronger head and by doing that they were actually losing the carcass and forgetting that the main job of the [breed name] is a meat breed ... I think people as a whole realise it was getting a bit silly and have toned it back now ...

The comments illustrate a clear sense of a gap between a 'truth' concerning aesthetic perfection (particularly in the show ring) and other 'truths' concerning production-oriented qualities. The speakers show how in some ways they become torn between show- and production-orientation. This arises because there can be in fact two 'commercial' markets as far as the pedigree breeder is concerned: one can breed for the high value 'fancy' market or for the productive market. Indeed, one breeder said that in his sheep breed there is no productivity value in colour, but that he can sell lambs with grey faces for more than those with white faces, although they

are otherwise the same. He gains economically from that, then. But the purchaser doesn't gain any additional value from the lambs, because they are selling to the abattoir where no value attaches merely to colour. Established aesthetic 'truths' about colour, even where colour makes no real difference to animals' productivity, can thus strongly influence commercial markets and hence breeding decisions. Seeing this sort of situation as absurd, a beef cattle breeder reflected that this was 'pathetic really, farmers are very good at hanging over gates, chatting about sort of whether they have got the right coloured ears or tips or something ...', to the neglect of what he viewed as the productive qualities which ought to be fostered.

Turning to our second source of tension, we here indicate how attempts to implement genetic modes of evaluation can cause friction with practical-aesthetic traditions of judging livestock. Since we have discussed this in depth elsewhere (Holloway 2005, Holloway et al. 2009; Holloway and Morris 2012) we are deliberately brief here.

For some breeders, following the logic of one of the commentators above, it had become possible to argue that visual assessment should be abandoned in favour of genetic assessments only. One beef cattle breeder asserted as much in saying

I will be quite honest, I don't think anybody looking into the future in the beef industry ... you can't go forward without knowing the genes, the genetics. I mean just to go on appearance and colour I think is a joke.

This is quite an extreme position however, and most breeders attempt to negotiate or compromise between practical aesthetic evaluation and what they are told by 'the figures' – the EBV and/or genetic marker data which they increasingly have available. EBVs indicate, in theory, a set of specific genetic characteristics that will be passed on to offspring; these tend to relate to quantifiable, productivity-oriented factors. The tension arises where the EBV data, which might indicate superiority or inferiority in certain but very specific regards, conflicts with what the breeder 'sees' in the *whole* animal which can tell him/her about its 'character' and potential contribution to a breeding programme. Different notions of 'the good animal' can be constructed through considerations of either 'the figures' or practical aesthetic looking, as the following comments from beef cattle breed society representatives indicate.

... you may get these figures as good and then you get there and he has a long plain face, which you absolutely hate, and you wouldn't buy that ... So breed character, you have got to have.

'[Breeders] still like to see a good head on a bull that's got character and has a good top line ... they've got to be correct and functional. So these [EBVs] don't measure functionality. They just measure what's under the skin, you know. So you need this as well as the visual assessment of a bull.

As the second of these comments implies, it is not necessarily the case that EBVs and practical aesthetic judgment must conflict. In some cases they are complementary, simply telling the breeder different things, from different perspectives, about the body and breeding potential of the animal they are appraising. Pointing to the potential for both complementarity and tension one sheep

breeder explained, 'I always try to make my best show animals, my best recorded animals. I've been quite lucky in that I've just about managed that, but invariably most people will find their best recorded animal's an ugly brute'

Conclusions

Practical forms of aesthetic evaluation are evident in relation to livestock breeding. This practical aesthetics is heterogeneous and in flux (as 'fashion' or market demands change, for example), but constantly has to negotiate between 'fancy' and 'productive' traits. Practical aesthetics is not separate from the worldly practices of livestock breeding and the use of farmed animals, but enters into the politics and ethics of these practices as judgements are made about the quality of animals. For example, the politics of breed societies consists in part of debates concerning if or how a breed should be 'improved' in response to market demands, with implications for breeding interventions and the subjectification of breeders. There is a geography to this: evaluations occur in particular farm spaces (barns and fields), and with reference to other spaces (e.g. show rings, auction markets, abattoirs and even supermarkets). As such practical aesthetic judgements are spatially situated, and also situated within the networks through which animals move as they are reared, sold, showed or slaughtered.

In spite of the advent of genetic techniques, and of their heavy promotion within the industry by powerful state and commercial institutions, practical aesthetic evaluation endures and is still of key significance to many, perhaps most, breeders in their breeding decisions. What happens in practice is that a set of relationships is worked out between practical aesthetic and genetic (and other) modes of evaluation. These relationships, like practical aesthetics, are heterogeneous and in flux (Morris and Holloway 2013), but add to the story of an ever emergent mode of practical aesthetic evaluation in livestock breeding.

In relation to our conceptual framing of livestock breeding, that of biopower and in particular its framing by Rabinow and Rose (2006), the discussion above suggests that there are alternative truths and different authorities related to livestock breeding, allied to different modes of intervention and of subjectification. Traditionally, practical aesthetic truths about the quality of particular animals and whole breeds have been constructed by authoritative breed societies, and individual breeders have based their breeding interventions on what such truths indicate are 'good' animals. Breeders are subjectified through the formation of their longer term experiential knowledges, which involve an immersion in cultures of livestock breeding and showing. This doesn't preclude change, as we have seen, as particular fashions take hold and changes to the picture of ideal animal lead to changes in breeding objectives. Similarly, different truths pertain to the visual evaluation of what are seen as either 'show' or 'commercial' characteristics. The advent of genetic techniques in livestock breeding provides the potential for new kinds of breeding interventions and new breeder subjectivities, associated with 'genetic truths' and with the authority of those institutions, including some breed societies, which have most fully engaged with them (Holloway et al. 2009). The analysis herein has opposed (or distinguished) a practical aesthetics of livestock with these genetic techniques. Future research might explore whether these techniques are associated in themselves with aesthetic

judgements (an 'aesthetics of genetics' perhaps); that is, can data sets and representations of genetic 'breeding value' have a beauty of their own?

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