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Falling short of being the 'good farmer': Losses of social and cultural capital incurred through environmental mismanagement, and the long-term impacts agri-environment scheme participation

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1. Introduction

The idea of the 'good farmer' is an established concept used to identify which practices are respected by members of the farming community. The concept has helped underpin an analysis of which behaviours are (un)attractive to land managers, beyond a reductive economic analysis of the costs and incomes associated with the adoption of different management decisions. The behaviours of the idealised good farmer are not, that is, limited to those behaviours that are necessarily economically optimised, but can instead be linked to other stylistic or existential objectives held by community members (Burton, 2004).

In its earliest conceptualisations, the good farmer concept was used to investigate the quasi-religious duties farmers feel towards agricultural production, and the tensions that can cause in combatting agricultural pollution (Silvasti, 2003). Since then, it has been used to better understand a number of different issues pertinent to the study of agricultural decision-making and policy effectiveness: the control of exotic livestock disease (Naylor et al., 2018), farm succession (Riley, 2016a), and fisheries management (Gustavsson et al., 2017). The concept has had particular traction with research looking to better understand the adoption of environmentally sensitive management practices and participation in agri-environment schemes (AESs) (Burton et al., 2008). As AESs rely on the voluntary participation of target farmers, the capacity for the schemes to deliver substantial environmental improvements turns on the willingness of farmers to volunteer themselves for participation (Morris and Potter, 1995). If land managers regard scheme participation as an unattractive prospect – even if participation is well remunerated - then those schemes are liable to fall short of the scale of impact desired of them (Falconer, 2000).

The aim of this paper is twofold. The first objective is to trace the development of attitudes towards the adoption of environmental practices in the farming community and to add to the lineage of the exchanges revolving around the good farmer concept. What is the good farmer's current relationship with environmental management and participation in an AES, and how does this tally with previous studies tracing the contours of the good farmer? The paper will revisit the reproduction of cultural capital through the adoption of environmental practices. As we will see, whilst the capacity for environmental management to reproduce cultural capital may have hit a ceiling, the good farmer concept has crystallised around a dislike for environmental negligence and the capacity for improper environmental management to lose both cultural and social capital. The second objective of the paper is to assess the role that participation in an AES has played in motivating the changed position that environmental management occupies in the psychologies of the participants, as well as a look at the scheme's wider social impact on the agricultural industry beyond individual participant's personal experiences. Despite early interest in the idea of long-term attitude change being catalysed through AES participation, (Ilbery and Bowler, 1998; Wilson and Hart, 2001), the topic is still relatively under-researched. This research uses the good farmer concept, along with Bourdieu's social theory to contribute to that literature. The research is conducted in relation to the Entry Level Stewardship (ELS) portion of England's 2005–2014 Environmental Stewardship Scheme: speaking to managers who have been involved with the scheme, inspecting their relationship with environmental management practices, and looking at the role participation has had in generating the attitudes represented in the industry.

2. Conceptualising the good farmer

The good farmer concept has emerged as a useful tool in assessing the factors that motivate or deter potential AES participation. It is capable of going beyond an analysis of the relative economic value of the scheme's repayments and the transactional costs needed to establish the scheme options (Karali et al., 2014). Whilst the financial rewards for the adoption of scheme-promoted practices may be a telling determinant in the willingness of farmers to participate in a scheme (Ruto and Garrod, 2009; Morris et al., 2000), an economic analysis of the costs and rewards associated with

participation cannot account for the full range of motivating factors (Defrancesco et al., 2008).

Initial conceptualisations of the good farmer were expressed in terms of tidy, productive management styles, and the adoption of management practices that pertained to the existential objectives held by farmers to produce food (Silvasti, 2003). Subsequent application of the concept demonstrated a problematic incompatibility with the sorts of management techniques promoted by AESs, and the stylistic and existential objectives held by the land managers (Burton, 2004). Those objectives, tied up with the productivist goals of high production and intensification meant that, even where farmers were amply remunerated for the adoption of environmentally sensitive management techniques, they were resistant to participation due to the loss of yields the schemes represented and the untidy management techniques they necessitated.

To help bolster the theoretical development of the good farmer concept, different researchers have since deployed Bourdieu's social theory (Burton et al., 2008; McGuire et al., 2013) which details how individuals are moved to act to gain favourable standing in the hierarchy of their field (their social grouping, tied together by shared codes and values) within which they operate (Bourdieu and Wacquant, 1992). To do this, individuals seek to earn symbolic capital – itself reproduced by three constituent forms of capital: economic, social and cultural. Economic capital – money, shares, things of direct financial value - is the motivational factor most easy to identify when mapping out an individual's behaviour. Individuals are also motivated by the accumulation of social capital - the network of social contacts an individual is part of, and the sum of the capital to which those in-group members can lay claim. Cultural capital, the third form, is itself split further into three types - embodied (dispositions, skills or knowledges that relay the accumulation of an individual's expertise), objectivised (objects that communicate the skill/cultural expertise of the individual in arenas respected or recognised as legitimate by the field's rules), or institutionalised (qualifications, accolades) (Bourdieu, 1986).

Shaped by one's upbringing, social experiences and education, an individual's habitus is the key to their ability to successfully strategise their way through a given field and reproduce the different types of capital needed to achieve good standing (Grenfell, 2008). Defined as a "system of lasting, transposable dispositions which, integrating all past experiences," the habitus "functions at every moment as a matrix of perceptions, appreciations and actions" (Bourdieu, 1977 p.95). The habitus, forged by the social conditions of a given field, and functioning as the lens through which one's social world is constructed, organised and processed, helps an individual internalise the tacit 'rules of the game'. Those rules determine which practices are perceived as legitimate in the field, and which can reproduce the different sorts of capital (Bourdieu and Wacquant, 1992).

The habitus functions as "structured structures, predisposed to function as structuring structures" (Bourdieu, 1990 p.53) - as something that determines behaviour, and organises perceptions that was formed by one's own life experiences and social conditioning, whilst at the same time itself being iteratively reformed and responding to new knowledges, experiences and field conditions (Bourdieu, 1990). The habitus' "durable but not eternal" nature (Bourdieu and Wacquant, 1992 p.113), represents for an individual a consistent tool through which the social world can be consumed, understood and navigated, whilst at the same still subconsciously remodelling itself in response to the new knowledges, priorities and beliefs prominent in a given field. An individual can, as a result, successfully strategise their way through a field even when the rules of the game that dictate which behaviours and artefacts reproduce capital are in flux.

Earlier papers deploying Bourdieu's theory to look into the motivational factors influencing the adoption of environmental practices on farms identified a close link between the rules of the game of the agricultural field and the productivist goals of high yields, specialisation and intensification (Burton, 2012). As a result, the 'untidy' management of land, or the removal of land from agricultural production as mandated through AES participation came with an unpalatable loss of cultural capital, due to the associated deviation from the productivist ideals to which the rules of the game were tightly bound, and to which the individual's habituses were accustomed. Those productivist goals enjoyed legitimacy and recognition in the rules of the game and so it was behaviours that pertained to those objectives that were capable of reproducing cultural capital. The incompatibility between scheme participation and capital reproduction was identified as a key feature in the cultural resistance towards AES participation (Burton et al., 2008).

This incompatibility was also predicted to be a long-standing issue. The reproduction of cultural capital (especially

its embodied form) is tied up with the demonstration of one's accumulated skills and knowledge, and for as long as AESs options do not offer managers the opportunity to show their expertise and managerial skill, then they will not be arenas in which cultural capital can be reproduced (de Snoo et al., 2013). AES options, that is, typically involve the removal of land from production, or the adoption of a less intensive approach, and so produce a more 'natural' and less farmed appearance. As a result, they were not regarded as opportunities to mobilise and demonstrate their farming expertise, and so were not arenas in which embodied cultural capital could be reproduced (Burton and Paragahawewa, 2011).

Other researchers have focussed on the malleability of the rules of the game in the agricultural field and the responsiveness of the managers operating within it. They inspected the changed levels of capital that different behaviours reproduce for members of the agricultural field, and the habitus' ability to remodel itself in response to changing field conditions. Sutherland and Darnhofer (2012), and Riley (2016b), for example, were able to explain how, through the integration of new field conditions, such as changing agro-economic conditions (in which environmental subsidies and the premium attached to organic food-stuffs have become a long-standing, profitable, and recognised feature) into farmers' habituses, the good farmer concept no longer came with a necessary incompatibility with the adoption of environmentally sensitive or organic management techniques. Contrary to previous predictions, such research was also able to show how the delivery of AES options and the integration of other environmentally sensitive management techniques into the farm system were fertile arenas in which the respective managers could demonstrate their skill and understanding, and so had become opportunities to reproduce embodied cultural capital.

This paper also uses Bourdieu's social theory as a means of adding to the lineage of the good farmer literature. Such research tools have underpinned important analyses of the farming community's relationship with agri-environmental management and using those same tools here will not only provide the framework for a similarly revealing analysis but will also allow for continuity and comparison of results with previous research. Section 4.1 will present findings that corroborate and develop the findings of previous papers: understanding when and why cultural capital can be reproduced through the adoption of environmental management practices or participation in an AES. Section 4.2 will add a newly recorded feature of the good farmer concept – namely the capacity for improper environmental management or environmental negligence to lose cultural capital. Section 4.3 will then consider the long-term social impacts of ELS.

3. Methodology

The research conducted interviews with participants of the ELS tranche of the 2005–2014 Environmental Stewardship Scheme. ELS was designed as a 'broad and shallow' scheme whose explicit aim was to attract high levels of participation by offering remuneration for the adoption of environmental management techniques that only modestly exceeded legal environmental standards (Hodge and Reader, 2010). In terms of its coverage, ELS represents a unique chapter in the development AESs in England. At its peak in 2013, the scheme covered 6.2 m ha of land - 72% of agricultural land in England (JNCC, 2017). In the context of this project, ELS was used as a methodological lens through which the long-term social and attitudinal impacts of scheme participation could be inspected, whilst also serving as a departure point for wider reflections about the nature of the good farmer, and its relationship with environmental management.

The data collection process was comprised of 40 semi-structured, hour-long, interviews with ELS participants, conducted from April to August 2017. 25 of those interviewees also gave a repeat interview, one year later, resulting in a total of 65 unique interviews. After their being transcribed, the interviews were coded and analysed with the assistance of NVivo. Where repeat interviews were given, they were done so after the conclusion of the interviewee's respective ELS agreements – and so they were able to reflect on the maintenance (or not) of the management options contained in their contracts.

The process through which the 25-strong cohort of the initial 40 interviewees were selected for repeat interviews was the combined effect of longitudinal research attrition and purposive sampling. Research attrition is the phenomenon through which a number of interviewees are unavailable or unwilling to be involved in successive rounds of interviews. It is an inevitable feature of longitudinal research (Olson, 2005) and especially due to the minimal impact it had on the research – with only one interviewee contacted for a repeat interview rejecting the request – the

phenomenon is not regarded as problematic. The purposive selection of certain interviewees over others was predicated on specific interviewee's ability to meaningfully reflect on the ongoing management of their respective farms. In some cases, it was made clear that the interviewees were playing increasingly minor roles in the management of the farms, did not understand their current or future participation in AESs, or were in the process of selling their land. Whilst those experiences may have useful for research looking into other topics (retirement, farm succession), those interviewees were not contacted for a second interview.

Interviews were split across two case studies – one in the midlands and one in the east of the country - shown in Fig. 1, below. As with other research papers that form part of the good farmer literature (Burton et al., 2008; Burton, 2012), using multiple case studies is best understood as a means of inspecting the shared conceptualisations of the good farmer concept and the reproduction of different capitals across different locations and farming communities – and not as a comparison of their divergent social codes.



Fig. 1. Case study areas.

The decision to use these areas in particular is based on an element of the research design that should, for transparency's sake, be noted. The research presented here derives from a NE-funded PhD studentship, with the dual purpose of assessing the long-term social and land management impacts of ELS. The bulk of the data presented here is, in other words, relevant to the 'social' half of the project – using ELS as a lens through which an updated version of the good farmer can be developed. It is the other half of the research – a more qualitative look into the uptake of different scheme options and their post-contract maintenance – that motivated the multiple case study design. The location of the case study areas, and the fact that there are two of them (instead of, say, one or three) is, therefore, an inherited feature of the research design not directly relevant to the particular goals of the paper. As a result of this, the data arising from the two case study areas. Especially given the precedent set by other papers that have similarly used multiple case studies for their own good farmer-related work, and which similarly treated them as one data set, this is not perceived as problematic. Nevertheless, the author recognises that this represents a minor limitation– that the data presented here are derived from a research project with objectives and methodological decisions not exclusively orientated towards the objectives and themes of this paper.

A second potential limitation also needs to be noted. Although the author recognises how the economic factors,

scheme options and management practices particular to the different farm systems will have a bearing on the environmental attitudes of the respective farmers (Riley, 2016a), the research methodology did not make systematic efforts to compare the reflections offered by, say, arable and livestock farmers, or directly contribute to the literature detailing the symbols of good farming prominent in particular farm systems. Instead, the interview schedule and subsequent analysis process was focussed on their identities as AES participants. Doing so allowed the research to pay specific attention to the relationship that AES participation has with the good farmer concept, and on the role that participation has played on the participant's developing vision of the good farmer.

Although such a methodological decision came at the expense of a finer-grained look at how this may differ across the farming industry, valuable insights are nevertheless available when charting the rules of the game across the wider agricultural field. As noted by Burton et al. (2008) and Sutherland (2013), whilst the symbols of good farming may vary according to different farm systems, they are operating in shared economic and cultural histories, and they have a shared social code in which prestige, and the different capitals flow towards management techniques that betray the skill, knowledge and expertise of the respective farmer, especially insofar as they pertain to the farm's economic success. The focus of this paper is to trace how these overarching priorities interact with the adoption of environmental practices, especially in relation to modern agricultural economics and scheme participation. No dedicated analysis, therefore, is offered to help understand how this functions differently for different farm systems. Further study into the symbols of good farming represented in different farm systems would be of significant value.

As part of their involvement with the research project, NE provided anonymised data relating to all ELS contracts. Corresponding contact information for specific contract holders was then supplied, once the subset of contracts starting/ending in the target window, and located in the target areas had been established. In line with NE guidelines and GDPR rules, those contact details have now been destroyed.

4. Results

4.1. The good farmer, and the reproduction of capital through environmental management

Interviewees who had been in the farming industry for several decades were able to shed light on the changing rules of the game in the agricultural field, and the changed capacity for different practices to reproduce cultural capital. Where environmental management, due to the deviation from the productivist goals of the good farmer, may have once lost the participating farmers an amount of embodied cultural capital, the agricultural community has undergone substantial changes. I-40, a medium-scale livestock farmer, leans on the idea of a generational divide to help characterise the shift:

"There were farmers ... they tend be older farmers who were brought up after the second world war, saying that you must produce as much food as possible ... they would sneer and laugh at people who went into environmental [schemes] ... I do think a lot around my generation are very open minded to it"

The changed rules of the game – here expressed in terms of the different responses one could expect for adopting environmental practices at different times - have, at least in part, been catalysed by new economic and social realities in farming the farming industry. The field conditions prominent in the post-war era prioritised the need to produce as much food as possible, and the rules of the game accordingly legitimised land management styles that pertained to achieving that goal. As we will see, as subsidies are becoming increasingly predicated on the delivery of environmental standards, as consumers preferences for higher environmental standards are exerting their influence on supermarkets and other buyers, and as concerns over long-term soil health and its business implications become more widely understood, the agricultural field is experiencing a change in the rules of the game that are remodelling how both economic and cultural capital is being reproduced. These new realities have become widespread and recognised features of the field conditions and have been integrated into the habituses of the managers in the agricultural field. Those changes are repositioning the perceived value of decisions that are not geared towards the short-term maximisation of yields, such that they are no longer necessarily a sign of lax financial management, but can instead reflect the farmer's navigation of the farm subsidy system, of their responsiveness to consumer preferences, or of their long-sightedness in tackling soil health issues.

This idea is evinced in the statements I-28, a young livestock farmer-cum-agricultural college lecturer. Gleaned from

interactions she has with her students, she reports that:

"You can hardly sell now without being Farm Assured and to comply with Farm Assurance, you're almost already doing half of the environmental stewardship stuff anyway ... it's 'if they haven't cut that hedge this year, they must be in that scheme' or 'if they've got that strip they must be in this scheme'"

The need to be environmentally considerate is so ingrained in the maintenance of a viable business in the modern farming world, that it is has been impressed upon the habituses of younger farmers, and has helped shape how they unthinkingly read the management decisions of their neighbours. Participation in an AES or meeting the standards of a Farm Assurance scheme, from this position, are treated as a non-contentious, standard part of managing a farm business. As a result, such decisions are capable of reproducing embodied and objectivised cultural capital in much the same way that any other farm practice can: as a business decision taken to ensure the farm's financial flourishing, and as something that communicates the respective manager's understanding of current farm economics.

Unpacking environmental behaviour as operational expedience is also evident in the business language employed by I-32, a large horticultural agri-business, when discussing soil conservation:

"Organic matter is critical, isn't it, to the land? A lot of farmers look at it like that, now. They've adopted that sort of thing. It's become best practice."

Just as with I-28's account, above, the changed field conditions and corresponding shifts in the rules of the game have been thoroughly integrated into the above farmer's habitus, such that the adoption of sustainable soil usage techniques is being constructed as a value-neutral 'best practice' attempt to run the farm-business as economically as possible. Soil quality was frequently cited as an important intersection between good long-term business management and environmentally sustainable behaviour. Consider the version of good farming given by I-02, who ran a large mixed farming operation:

"That's what good farming is - passing on a viable business, and not ruining the ground"

I-21 a medium-scale cereals farmer, who had become heavily involved in minimum-till farming, reported that good farming is:

"Trying to farm sustainably, trying to make a profit, whilst hopefully improving the soil."

For others, the commercial value of environmental management is grounded in its marketing capabilities. I-22, a large arable agri-business, discussed the wildflower strips on the farm driveway:

"Our customers are Tesco's, Sainsbury's, Asda's. When we have a customer visit, we always show them we've a strip down here, we've got game strips there."

The public pressure for food to be produced to a higher environmental standard is exerting its influence on supermarket buyers, and, in turn, on the decisions taken regarding the management of the land. Whilst these concerns may not be grounded in intrinsic environmental motivations, they are nevertheless having an impact on the steps farmers are taking to manage their land more sustainably. In all of the above accounts, the field conditions – consumer preferences, the price premium associated with Farm Assurance and AES schemes, the long-term business value of soil-conservation practices – have been recognised and integrated in the field member's habituses. The rules of the game now recognise the legitimacy of making such environmental concessions on the farm as a means of ensuring the farm's financial flourishing. Embodied cultural capital is, as a result, on offer for those making such management decisions on the grounds that it betrays, of the respective farmer, their understanding and navigation of current field conditions.

Those who were optimistic about the capacity for AESs (and the exposure to environmental information and practices they represent) to catalyse long-term attitude shifts (e.g. Lowe et al., 1999) may, however, be frustrated. In couching their respect for AES participation in the economic benefits they represent for the farm, some farmers are revealing themselves to be the 'superficial' participants described by early analysis of AES-participant motivation (Morris and Potter, 1995), and thus those least likely to experience meaningful, conservation-orientated attitude changes. The change in the rules of the game in the agricultural field have occurred, that is, only to the extent that

cultural of capital is now not risked in the same way by scheme participation (Burton et al., 2008) because of the new and established field conditions that have reshaped the relationship between economic success and environmental management. Just as Sutherland (2013) used Bourdieu's 'taste of necessity' to show how the spread, uptake and expanded respect for organic farming is tied up with the economic value that such managerial approaches can offer for a farm in achieving the 'prime' objective of running an economically viable unit, the above findings show how the capacity for participating in an AES or the adoption of soil conservation practices to reproduce cultural capital is tied up with the business value those approaches represent for a farm. The good farmer is not, in this conceptualisation, necessarily a committed environmentalist, but rather one mindful of the intersection between good business and good environmental management.

There were, however, signs that the rules of the game in the agricultural field, and the good farmer ideal have been subject to more intrinsic environmental shifts. Namely, that environmental behaviour has become capable of reproducing cultural capital for the respective farmer for reasons beyond the economic contribution it can make to a farm's financial wellbeing. The best indication of this comes from the respondents who expressed a preference for scheme options that were environmentally successful and well-managed, over poorly delivered and environmentally valueless scheme options. A young shepherd who contributed to the I-12 interview, for example, explains that:

"You see some [scheme options] where there's clearly effort gone in. I graze a plot next to someone who's put in a lay for butterflies, and that's managed well. Others, they drill it and forget about it - a token gesture. The money's in the bank."

And when asked about his preference for the two:

"I've also got a lot of respect for people who are putting in the extra effort."

Similarly, I-15 a medium-scale arable farmer recalled a visit to a nearby farm:

"We went on a farm walk ... they put down borders, pollen mix or something. I've never seen so much rubbish! I never seen a plant!"

Asked directly if she would have respected it more if more if the pollen mix had been properly established, she replied affirmatively. In such instances, a well-managed and flourishing feature provide the same level of economic contribution to the farm as a poorly delivered option, and so the differing levels of respect that the former attracts over the latter is calibrated to the differing levels of environmental benefit the two are capable of delivering, and the skill and effort it communicates. In line with Riley's (2016b) analysis, AES contracts and the successful delivery of their constituent management obligations have become arenas in which the respective manager's skill and managerial expertise is on show, and thus fruitful arenas in which a farmer can reproduce embodied cultural capital.

There is, however, a relatively low ceiling limiting the capacity for environmental management to reproduce cultural capital. One of the primary objectives expressed by the interviewees was the need to run a financially viable unit (recorded also by Burton and Wilson, 2006, and Sutherland, 2013). Where some environmental feature interrupts the attainment of that goal, then the motivations for taking those management decisions are called into question, and the actions are liable to fall outside the remit of the good farmer. In such cases, the embodied cultural capital that is otherwise available for the implementation of environmental management practices is rendered out of reach: their shortfall of skill and expertise (central to the reproduction of embodied cultural capital) means they have failed to properly navigate the intersection of environmental improvements is prioritised over the maintenance of an economically viable unit. Bourdieu's 'taste of necessity' here cuts the other way: whilst cultural capital may flow towards the management practices that frustrate a farm's business viability.

I-09, an arable farmer who undertakes a lot of contract work, explains that:

"It [good farming] is getting the balance. You can't go too far [with a low-intensity system], as you'll be out of business, but soil structure is a big issue."

Or the exchange between the livestock interviewees of I-12:

"I think looking over the hedge and seeing buffer strips and wildflowers, we all like that - don't we?" [first interviewee]

"I certainly notice it." [second interviewee]

"But if we feel that the growing of that is going to affect the margin of profit, to such a degree that things aren't going to make any money - that compromises our thinking."

The qualification "to such degree" in the above statement is revealing: that environmental features may lose the participating farmer some money is both acceptable and inevitable. When that loss falls outside the tolerance level - the limit of which is when the viability of the business is jeopardised by the environmental activity – then the capacity for the environmental management to attract the manager's respect stops. The in-expertise of the farmer is revealed when their environmental efforts undermine the farm business, and, as a result, the embodied cultural capital that the feature may otherwise reproduce is rendered out of bounds.

4.2. Environmental mismanagement and the loss of capital

Consider I-28's account of how the youngest generation of farmers digest and respond to the environmental management of their neighbouring farmers, and their differing responses to scheme participation and environmental negligence:

"I think it's the younger generation coming through. More like 'no dad, you can't just burn it [plastics or tyres]' ... there will always be the exceptions, but it will be difficult to be a dirty farmer, now ... If you're talking about looking over hedgerows, it's a case of 'guess which stewardship they're in.""

The attitudes of those farmers, whose habituses are being forged in contemporary field conditions, represent a candid insight into the rules of the game of the agricultural field. The indifference I-28 attributes to the young farmers ('guess which stewardship they're in') is revealing. Participation in a scheme is neither *de facto* ridiculed nor lauded. They are not necessarily good farmers for being in those schemes, nor are they necessarily *not* good farmers.

Judgements of nearby farmers' environmental profiles are, nevertheless, taking place, and cultural capital is clearly on the line. The point at which that judgement process is being triggered, however, is at the other end of the spectrum – in the realm of environmental negligence and 'dirty farming'. The good farmer concept as it has so far been conceptualised in the literature is, in such instances, insufficient to fully explain this feature of the rules of the game. The idea of falling short of a perceived minimum environmental standard and the criticism that doing so can attract emerged, however, as an important feature in social code expressed by the interviewees, and a telling factor in how one's environmental profile determined the cultural capital to which one could (or could not) lay claim. The capacity for environmental negligence to lose cultural capital and, potentially, social capital, is here introduced to the good farmer concept farmer to fill this explanatory gap.

The most salient example of the phenomenon relates to the management of soil. We have already heard about the value and respect associated with long-term soil management, and the embodied cultural capital available for the farmers demonstrating their understanding and pro-activity in tackling those issues. In direct analogue, the short-term and intensive usage of soils emerged as an arena in which farmers could equally display their lack of skill and understanding and so where they could lose embodied cultural capital. Unsustainable soil usage came at the sharp end the criticism of I-02:

"[bad farming] is non-sustainability ... you can be unsustainable for a while, but the costs are being paid further down the line ... what are there, only 50 harvests left?"

I-21 offers a very similar analysis:

"bad farming is ... not looking after your soil properly. People are thinking about it far more these last couple of years, definitely more on the agenda."

As does I-10:

"[Bad farming] is purely farming for profit – taking as much as you can from the land and not giving anything back ... From a sustainability point of view, you can't do that."

I-04, a medium-scale arable farmer, offered the same sentiment. When asked about the future of farming, he reported that

"You can't say it'll get worse as farming is already pretty intense around here. ... That was good farming, coming back to a previous question, rotating arable and a sheep flock, it was doing good all round ... It's about balancing the financial side, whilst trying to incorporate the environmental side."

Here, intense farm practices are conceptualised as being bad and the more unsustainable and intense they get, the worse they are. The farmers that have been at the fore of the perceived drive towards the exploitative short-term soil usage are heir to the above criticisms and, due to the lack of understanding and skill those farmers are revealing through their adoption of unsustainable soil usage, are risking cultural capital. The good farmer is mindful of the intersection of good business and good environmental management and by adopting an overly intensive approach, one reveals how poorly one has integrated those new knowledges into one's habitus, and one reveals the gulf opening up between their management style and that of the good farmer. Cultural capital, which is tied up with the agile navigation of contemporary field conditions is accordingly risked. This sentiment – along with a demonstration of how it is actively characterising the way in which nearby farmers are judging each other – is perfectly captured when I-03 explains that:

"If you're bad environmentally, it normally means you're a bad farmer. If your fertilisers, pesticides and everything go in the water courses, you're pouring money down the drain ... We saw someone out spraying today and half of it's drifting [i.e. being blown into hedges or waterways, and not onto the target crop], and you think some of that is $\pounds 120$ a can!"

This feature of the good farmer also emerged in instances beyond the clear-cut cases in which good environmental and good economic management intersect. Consider the response of I-06, a small arable farmer, when asked whether farmers are judged according to the environmental dimension of their management style:

"No - apart from if you get somebody who wipes out every tree in sight!"

And when a nearby farmer was planning to remove a number of in-field trees from their land, he tried:

"Phoning round to see what we could do to stop it."

Clearly, for I-06, whilst there may be only a limited amount of cultural capital available for environmental proactivity, those farmers effecting excessive environmental losses are falling short of a perceived minimum level of environmental care and are risking cultural capital. Here, the concerns are not around the business value that the farmers are failing to avail of (i.e. through their miscomprehension of the intersection between good environmental and good business management) but about more intrinsic environmental concerns. Being the good farmer is, in this understanding, incompatible with an approach that includes causing such environmental degradation, especially when doing so is not done in the name of ensuring the farm's financial viability. Adopting such an approach, as can be seen, also risks potential losses in social capital. I-06 explains the explicitly socialised response he gave to the event: calling out the farmer planning on effecting the environmental losses and exposing him to the other field members as one deviating from the environmental standards those members are expecting of each other.

Such a response to environmental damage was reported elsewhere, too. Speaking in relation water quality issues, I-03 explains the environmental expectations a local group of farmers, brought together by the local waterboard to tackle eutrophication, were placing on each other:

"We know each other well enough that it [water polluting behaviour] would be flagged up. Something would be said."

Here, the good farmer concept includes the expectation that appropriate water conservation measures are integrated onto the management of the farm as a means of securing their shared environmental objectives. Where those practices are not being followed, and where environmental losses are being caused, the farmers risk the criticism of the other group members. The rules of the game prescribe how both social capital (effected through the social criticism or being 'flagged up') and cultural capital (by revealing one's shortfall of skill knowledge and motivation by failing to act against water pollution) are risked through one's environmental mismanagement. The same process emerges in a story relayed by I-39:

"I struggle with the chap, here ... he'll spray, and it'll drift onto the 6m buffers - you could be more accurate!"

And then, later on in the interview:

"You are not gaining any more productivity by that extra metre. In fact, the more bees and pollen things you've got, the better job you're doing ... Luckily the neighbour who rung him up to have a go told him that."

Such responses reveal an important mechanism through which these environmental standards are being socially enforced. The good farmer is mindful of the intersection of proper business and environmental management and is skilful ('you could be more accurate') and knowledgeable ('you're not gaining any more productivity by that extra metre') to manage their farm in a way to not effect unnecessary or problematic environmental damage ('the more bees and pollen things you've got, the better job you're doing'). Where a manager falls foul of those expectations, the field members are liable to intervene ('the neighbour who run him up to have a go told him that'). Losses in cultural capital (because of their shortfall of skill, knowledge) and social capital (because of the potential social isolation or criticism) are incurred.

I-09 equated the overreliance on agro-chemicals with a disappointing loss of skill in arable farming – valuable indicators of how embodied cultural capital can be lost as a result of the environmental toll one's management approach is having.

"we don't need to use that glyphosate if we'd ploughed it properly in the first place and buried the rubbish".

Those farmers who make up for their shortfall of ploughing skill (which can be an effective weed-management tool) with glyphosate (a herbicide) are doing unnecessary damage to the land, where a more skilful and betterinformed farmer would not have had to have made such environmental concessions. The good farmer is one, in other words, skilful enough to 'plough properly', and one with the environmental awareness to adopt an approach that minimises the environmental impacts of their management. Those farmers reliant on glyphosate, and those effecting unnecessary environmental damage because of their shortfall of skill, risk the loss of cultural capital because of their failure to meet the minimum environmental standards implicit in the rules of the game of the agricultural field.

The nature rules of the game are brought into further relief when I-04 reflects on his decision to re-enter his ELS land into agricultural production, and the economic pressures motivating him to take that course of action:

"Honestly, I'm ashamed to be pulling up this ELS ground ... but you've got to get the dosh in"

Shame, in this instance, is an expression of the interviewee's guilt at having had to adopt a more intensive management approach by removing the areas reserved for wildlife in order to ensure the unit's financial viability, where he would otherwise have wanted to maintain the feature. Shame is tied up with the sense that one has fallen foul of some social norm or expectation - and so requires having internalised the set of social rules and expectations one's social grouping are demanding of each other (Ostrom 2000). I-04's account helps reveals, in this way, the characteristics of the good farmer, the nature of the rules of the game, and also how those rules are sufficiently established in the field for them to have been able to be subconsciously internalised into the habituses of the field members. The motivating influence of this feature of the good farmer is, therefore, manifest in a number of ways. The accounts of I-06, I-03 and I-39 above reveal how environmental standards are being socially 'enforced' through the interactions of field members; whilst the intimations of I-04 reveal how the subconscious internalisation of those rules into the interviewee's habitus are influencing the thought processes of the members of the agricultural field.

The emergence of this feature of the good farmer concept is, it is argued, a function of the combined effects of the integration of environmental knowledges into the habituses of the field members, and the non-negotiable primacy of the objective of running an economically viable farm. As farmers are unwilling to offer their respect for a manager whose excessive environmental proactivity is jeopardising their farm-business, the new knowledges and understandings (about long-term business viability and the importance of making environmental concessions on the farm, and of the seriousness of different environmental issues and the role that agriculture needs to play in attending to those issues) that have become widespread in the field are manifesting themselves at the other end of the spectrum: as a distaste for environ- mental negligence or mismanagement. Whilst there may be a low ceiling, that is, limiting the

extent to which environmental proactivity can reproduce cultural capital, the perceived legitimacy of environmentally conscious management styles have galvanised the field members in their criticism of overly intense or environmentally damaging management practices and the in-expertise and ignorance such practices reveal of the managers in question. The rules of the game, in other words, prescribe both how the good farmer's environmental management practices can reproduce cultural capital, as well as how one's environmental negligence (because of the negative business implications, environmental implications, and lack of skill, understanding and effort is communicates of the participating farmer) betrays the distance between themselves and the behaviours of the good farmer.

4.3. The long-term social and attitudinal impacts of ELS

Having laid out the revised rules of the game that determine when a farmer's environmental (mis)management can reproduce or lose them cultural or social capital, the analysis will now gauge what role scheme participation – and ELS in particular – has played in this process.

I-10, who runs the arable farming on a large estate-farm, relays his experiences of an AES pilot, prior to their participation in ELS:

"Years ago, the policy was to cut all the hedges every year. They were lovely hedges. Well they weren't, actually ... When we went into the original Arable Stewardship, which involved leaving the hedges for two years before you cut them, he [the farm manager] said 'terrible mess'. But he accepted it. There had been some research, looking at the number of insects that lived in a hedge that was cut every year compared to a hedge cut every two years, so he was happy to give it a go. Initially I suppose we felt it did look untidy, but we realised that in the second year, you got more things like dog roses and gull roses growing in there ... and frankly we've gotten quite used to it."

Although not in relation to ELS, participating in an AES emerges an important feature in his changing mindset. In being exposed to institutionally sanctioned research into the environmental value of the new cutting regime, and getting the chance to see those benefits play out in person, the interviewee's habitus has assimilated the new knowledges and behavioural habits, and has begun to adapt its relationship and regard for the 'untidy', biennial cutting. Initially casting the hedges cut every year as 'lovely hedges', the interviewee sums up the development by correcting himself: 'they weren't, actually', before eventually concluding that 'we've gotten quite used to it'. The explanatory power of Bourdieu's conceptualisation of the habitus, with its capacity to mutate in response to changing field conditions and new experiences, is clear. Over years of being exposed to the new practice, his habitus has internalised the merits of such a management style and the perceived legitimacy associated with the new practice has shifted, accordingly. For this manager, the hedges best placed to reproduce objectivised cultural capital are now those produced by the biennial cutting regime.

Also in relation to hedgerow management, I-20 explains how their scheme experiences have furnished them with new understandings of the environmental value of different management styles:

"I can see the point of leaving your hedges to grow at the end of the winter. That's something I have learned out of the scheme – because there are all sorts of things like blackberries that will hang on in there if you don't have them off, so there's stuff for the birds."

I-15's offered similar sentiment and explains how seeing the effects of a watercourse strip on her own land, paired with an expanded comprehension of their managerial and environmental value has motivated her decision to maintain the feature even after the contract's termination. Here, though, we can see how actively those reflections are influencing the way in which the management decisions of neighbouring farmers are being evaluated:

"[when ELS ends] we'll keep them [buffer strips] just the same ... I think they've made a lot of difference. I understand the old water courses ... Next door have kept all theirs besides ours [on the opposing bank of the brook], and they came out last January, and that's handy."

And elsewhere in the interview, talking in relation to grass borders, and her decision to keep those, too, after the end of the ELS contract:

"Next door, they've done the same, they've left them ... There's only one person I know about 3 or 4 villages away who's ploughed them and put them back ... I just think keep them in, really."

Decisions around the post-contract maintenance of scheme options emerged, in this way, as arenas in which the interviewees were evaluating the behaviours of their neighbouring field members. Participating in the scheme, and evaluating the relative merits of preserving the scheme practice compared to their pre-scheme behaviours played an important role not just on the participant's own decision-making processes, but on the way they evaluated the behaviour of their neighbours, too.

I-35, a medium scale mixed farmer, for example, had elected to keep most of the floristic margins established through his ELS agreement after the contract's conclusion. The agricultural returns he was able to secure through cultivating the marginal headlands were not, upon evaluation, worth the time or effort they otherwise demanded, and did not outweigh the ease-of-management benefits of having an uncultivated strip around the edge of his fields. His scheme experiences, and the light it has shed on the value of preserving the scheme practices long-term, are shifting the perceived legitimacy of adopting such an approach. These experiences are, in turn, influencing the standards by which he assesses the management decisions taken by farmers also managing land falling out of AES coverage, and the rules that determine which practices are capable of reproducing cultural capital. Asked about his motivations for electing to keep his floristic margins in, and the regard he has for other farmers in the area grappling with similar decisions, he explained that:

"Margins featured quite a bit [in his now finished ELS contract] which we've left all the same ... with the wildflowers some of it was amazing, the amount of insects and butterflies you get."

And later in the same interview, when asked if he respects farmers similarly deciding to keep their ELS margins, post-contract:

"Yes, I think once you've got them in there, you realise you weren't producing much from there anyway!"

The same trajectory is also reported by I-29. Her ELS contract included the removal of corners and field margins from arable cultivation. Having seen how marginal the land was, and how little return she could secure from keeping the land in production, she had elected to keep that land out of cultivation after the end of his ELS contract. Those experiences are, as with I-35 above, influencing the respect she had for nearby managers who had also elected to maintain their scheme features. I-29 explains that:

"Well I think this big neighbour, I was talking to him this spring ... He's taking corners out because those corners are underperforming and are bringing his average yields down, so he's better off"

The above interviewees, through the delivery of their ELS contracts, and through their assessment of the value of maintaining their ELS options, have come to apprehend the relative environmental and business gains of their pre-scheme compared to the scheme-mandated practices. The perceived intersection between environmental management and business savviness is further shifting, and the legitimacy associated with the integration of such knowledges (here, through the long-term adoption of ELS options), is exerting its influence on the rules of the game, and the evaluation of the behaviours of their neighbouring field members. As a result of this process, embodied cultural capital is available for those integrating such features into the management of their farms. Again, Bourdieu's habitus has notable explanatory power. The habitus operates as both the thing upon which new experiences and knowledges impress themselves, as well as the lens through which an individual processes and assesses other's behaviours. The participant's scheme experiences, along with the new knowledges and practices that their participation has provided, are reshaping their habituses which, in turn, is subconsciously reshaping the way in which they evaluate the behaviours of other members and the rules that dictate the reproduction of capital.

The long-term attitudinal impacts of participation were experienced in other ways, too. I-15, who would go on to apply for a successor Countryside Stewardship scheme, explains how her ELS experience has changed her understanding and relationship with AESs.

"When we first went into the schemes, I thought bloody hell, so many hedges, got to put so many strips in. You think Christ!.. But once you get around – we've got some big fields and once you do those 6m margins and we went 12m either side of the river, it's surprising how you soon gobble it up [the points requirements to secure an ELS

contract]."

Although not the 'conservation-orientated' shift researchers such as Wilson and Hart (2001), were looking for, the interviewee has nevertheless experienced an attitude shift. Namely relating to an improved understanding of the sorts of practices required by an AES and its application process. This phenomenon helps corroborates the findings of other, more quantitative work that show how previous AES experience is positively corelated with future participation (Lastra-Bravo et al., 2015).

Here, I-18, a large arable farmer, was reflective about how a number of different factors – of which participation in ELS is one – have all helped create a climate in which the adoption of environmental management practices are more widespread and legitimised:

"I would say that yes it [participation in ELS] probably has raised awareness ... Especially with water courses ... [But] I'm not sure that ELS as a stand-alone would hold its hand up and say "we've educated the farming nation", probably not, no. I think there's a lot more pressures coming in externally."

I-38 offers his own, less modest, assessment of the influence that ELS has had in the diffusion of environmental attitudes and practices:

"There is a mind change ... Firstly it [adopting environmental management techniques] was subsidised. And then it's just got folks into that mind set. Years ago, we wouldn't have thought about anything like that. Even though they are subsidised, it still puts you in that frame of mind. It gets you thinking what you're doing ... Everybody knows about it, don't they? It's very much in the news ... Years ago, you would be shunned".

Being forced to deliver the options of his ELS contract has helped I-38 reflect on the importance of environmental considerations when managing his farm. That change is, however, at least partly dependent on a perceived field-scale shift and is not just founded on his own personal experience of the scheme. By making reference to the ubiquity of ELS contracts and the media attention focusing in on agricultural environmental issues ('everybody knows about it ... it's very much in the news'), the interviewee hints that his being 'put in that frame of mind' is at least partly contingent on the fact that many other members of the field are similarly engaging in such reflections and are altering their practices accordingly.

The perception that ELS participation and the integration of environmental practices into the management of the farm has become widespread in the field is, in other words, having an impact beyond a given manager's person scheme experiences. That many other field members are making such considerations and pursuing such management approaches has helped disabuse environmental management of its negative stigma and has lent such practices a new legitimacy. Whereas scheme participation may have previously attracted the laughter or sneers (I-40) of other farmers, the widespread uptake and increased visibility of environmental management has repositioned it from being a fringe, minority pursuit to a mainstream one: one that is enjoying widespread recognition in the rules of the game.

In the English context, the role that ELS played in this process is clear. That the scheme engaged so many farmers and covered so much farmland emerged as a key feature in the increased visibility of environmental management, and the normalising effects of having such practices be so widespread. When discussing the representation of environmental practices in the industry, ELS emerged as an important touchstone in the proliferation of environmentally sensitive practices. I-01, for example, explains that:

"Going back to the 50s and 60s, we weren't environmentally conscious at all [interviewee]"

"What's caused the change? [Interviewer]"

"Well the incentives that came through, giving grants ... everyone is very educated now, I would say"

Before later specifying the particular widespread presence of ELS in this landscape of incentivisation, subsidisation and information spreading

"I'm sure everyone's got one [an ELS contract]" I-02 explained that:

"I think [compared to] the original Countryside Stewardship, ELS got a lot more acceptance – it seemed it was more mainstream. It's acceptable now and it's recognised. As I say, it is now the norm"

And I-34, commenting on the role that ELS has played in raising awareness of the negative impact that agricultural

practices can have on the environment:

"They've [ELS contracts] made people think, and think twice. It' even made dad open his eyes to what's going on!"

And finally, I-30 speaking more generally around the influence that ELS has had in raising awareness of new environmentally sensitive management practices and how they can be best integrated onto the management of the farm:

"I think ELS has been responsible for making you aware of what could be done – ways to create that environment and how to look after nature and still farm with it. It's been utterly helpful to farmers to be able to understand what they can do – to put ideas out there."

It is important to note that a range of other social and economic factors will have also contributed to the changed position that environmental management and AES participation occupies in the rules of the game. Amongst these, cohort replacement is a likely candidate. Cohort replacement relates to the inevitable shift of ideas, attitudes and practices that comes with the continual generational replacement of individuals that make-up a given social grouping (Firebaugh, 1989). In such a reading, the attitudinal shifts have not happened *because* of the scheme, but rather alongside the scheme as a result of cohort replacement – and interviewing participants risks misdiagnosing the root causes of the changes as being the result of the scheme's influence. The project's methodology was not equipped to consider this phenomenon. This is limitation of the research and future research, designed to assess its impacts, would help develop a better understanding of what factors are responsible for what scale of social changes experienced in the agricultural field. The above analysis is more a demonstration of the marks being left by participation on the habituses of the participants, and of the influence that the ELS has had in changing the rules of the game in the agricultural field in England in particular – and not an exhaustive account of *all* of the contributing factors.

5. Implications and further discussion

There remain two brief points of discussion arising from the results of the analysis. These will be presented below.

5.1. Evaluating the ELS scheme, and evaluating AESs more generally

In the English context, ELS's non-competitive and easy-to-achieve profile, was successful in achieving large uptake. This has helped to normalise participation in AESs and spread information about environmentally sustainable and business-minded practices. This normalising effect, paired with other social and agro-economic realities have remodelled the relationship between good environmental and good business management, and the position that environmental management practices occupies in the good farmer concept. ELS has, as a result, played its part in reshaping the rules of the game in the agricultural field in England.

Whilst those same characteristics – non-competitive contracts, easy to deliver options – are at the heart of criticisms relating to the quality and extent ELS's environmental impact (Hodge and Reader, 2010; Davey et al., 2010), the scheme's high uptake has nevertheless left an important cultural and behavioural imprint on the agricultural field. Such factors should be considered when assessing the policy's impact. As picked out by a number of interviewees – along with more dedicated studies such as Darragh and Emery's (2018) – this legacy is perhaps most significant in the management decisions taken by farmers coming out of agreements who have opted to maintain their scheme features.

Cautious lessons can also be extrapolated out beyond the confines of ELS's spatial remit. The individuals' scheme experiences, and the way they have been impressed upon the habituses of the participants, emerged as an important feature in the long-term adoption of scheme options and the updated social codes by which participants judge the behaviours of their neighbours. Similar experiences can be expected of many other AESs. Witnessing new management practices on their farms and getting the risk-free chance to consider the potential value of those practices (i.e. where the participants are remunerated for their adoption, such that they do not have to shoulder their potential financial implications) are fundamental to the AES blueprint, and similar experiences are going to be secured through participation in a range of other schemes. Provided the AES in question includes management practices that can feasibly be integrated into the management of the farm without major financial implications (which is more likely where the options have been located in poor or marginal parts of the farm), similar long-term behavioural shifts, and

similar mutations in the rules of the game are possible.

5.2. Updating the good farmer concept

The good farmer concept is a powerful analysis tool, that has been deployed in a number of different agricultural topics, to understand agricultural decision-making and policy effectiveness. The concept has been added to by successive research, and this paper is adding to that lineage. The research revealed the capacity for environmental mismanagement to risk both cultural and social capital, because of the inexpertise and carelessness it reveals of the manager in question. Just as each successive addition to the concept has sharpened its explanatory power, opening up new avenues for research and understanding, the new addition offered by this paper has similarly updated and refined the concept.

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