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Narratives of Environmental Events in the Winchester Pipe Rolls and English Historiography of the Early Fourteenth Century

Abstract: During the first half of the fourteenth century England was hit by various environmental impacts such as extreme weather events, outbreaks of murrains and Rinderpest, and flooding of coastal areas. The paper addresses the question, in what way contemporaries talked and wrote about these environmental impacts. In what way was weather described, explained and used as argument? Are there certain narrative patterns describing the effect of these events on the society? So far research focused on chronicles, annals and other narrative sources to answer those questions. In contrast, manorial accounts and other documentary sources are often not seen as narrative texts but only as the source of quantifiable data. But these texts were composed in a distinct communicative setting that created certain narrative patterns. The paper identifies and analyses descriptions, explanations and arguments brought forward in this type of sources. In a second step they will compared with narrative patterns of chronicles and annals. The variety of these narratives reflects the manifoldness of their perceptions and their societal consequences.

Keywords: manorial accounts, historiography, famine, extreme weather, narrativity, perceptions of environment

1 Introduction

During the first half of the fourteenth century, England experienced a number of remarkable environmental catastrophes including extreme weather events, outbreaks of sheep murrains and cattle plague, and flooding of coastal areas.¹ To understand how these events affected contemporary society, it is important to examine how those who lived during this time perceived and recorded these events: Who spoke and wrote when, why, and how about environmental events? How did they explain them or use them as an argument? Is it possible to discern certain narrative patterns? Research to


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date has focused on annals, chronicles, and other narrative sources to answer these questions, while regarding demesne accounts primarily as a source of quantifiable data rather than of narratives. However, the context in which accounting officials composed these documents favored certain narrative and argumentative patterns and forms of communication. This paper aims to identify and analyze references to environmental events in different types of sources, comparing the narrative patterns of demesne accounts and historiographical works. This analysis allows for a better understanding of differing perspectives on environmental impacts in a premodern society and sheds light on the cultural dimensions of how people dealt with natural anomalies. This paper focuses on the era of the Great Famine from 1315 onwards, as the extreme weather events of these years, which were in part responsible for the crisis, are well documented.

2 The Winchester Pipe Rolls

The Winchester Pipe Rolls are a unique body of precise documentation on agrarian production in late medieval England. Starting in 1208, the rolls contain the yearly demesne accounts of the manors belonging to the bishopric of Winchester. They provide information on various aspects of the agricultural economy, making them an important source for research on the intertwining of environment and society in fourteenth-century England. For the period of the Great Famine (1315–1322), the pipe rolls provide detailed evidence of extreme weather events and their repercussions, which was written down in close temporal proximity.

In the beginning of the fourteenth century, nearly sixty manors and ten boroughs, mainly situated in southeastern of England, were part of the estates belonging to the episcopal see of Winchester. In a system of direct management, unfree peasants produced a huge variety of agricultural products. On each manor a reeve was responsible for organizing and overseeing this production. At the end of the agricultural year (on the 29th of September), he had to answer to the bishop’s administration about the revenues, the expenses, and the stock of his manor. Auditors checked and, if necessary, corrected the account. The result of this communicative process was copied into a pipe roll, in which the accounts of all the manors for a single year were collected.

The main purpose of this system was to utilize the labor obligations of unfree tenants for market-oriented agrarian production. Although labor services were not very efficient and surveillance costs were rather high, the bishops of Winchester were financially successful during the thirteenth and fourteenth century. For the agricultural year 1301/1302 their sales of grain, livestock, and other agricultural products totaled almost three thousand pounds. The yearly income from the estates alone was about five thousand pounds, which made the bishop of Winchester one of the wealthiest magnates in England. The episcopal administration closely documented the management of the manors and the resulting income in the pipe rolls.

Michael Postan and Jan Titow relied primarily on the Winchester Pipe Rolls for their reconstruction of late medieval agrarian society in England. Titow, in particular, worked intensively with the accounts and tabulated references to weather events and their consequences. In 1960, he published a collection of these references for the years from 1219 to 1349. His compilation of brief verbatim quotes from the pipe rolls have proven quite popular in historical research because they seem to provide easily accessible and reliable information on late medieval weather events. Historians would do well, however, to keep in mind that these quotes are taken out of their original context and that their presentation could be misleading.

A few references from the accounts of the years from 1314/1315 to 1316/1317 serve here to illustrate these potential problems in interpretation when the context of the whole account is considered. Proxy data from the archives of nature, especially tree ring data,

7 The Pipe Roll of the Bishopric of Winchester 1301–2, ed. Mark PAGE (Hampshire Record Series 14), Winchester 1996, p. XII–XIII.
9 Pipe Roll 1301–2 (note 7), p. XXII.
10 CAMPBELL, A Unique Estate (note 5), pp. 26–29.
12 TITOW (note 6).
13 For example: KERSHAW (note 4), pp. 7, 15.
suggests that England received an extreme level of precipitation during this period.\textsuperscript{14} The Old World Drought Atlas, which combines several tree ring chronologies, shows increased humidity for the summer months of June, July, and August. 1315 clearly stands out as exceptionally wet.\textsuperscript{15} During the last month of the growing season, grain – and especially wheat – are extremely vulnerable to rain.\textsuperscript{16} Starting in 1314, the rainy weather led to back-to-back harvest failures which resulted in a grain shortage and, subsequently, steep price increases for grain and other foodstuffs.\textsuperscript{17} The resulting famine conditions affected not only England but also the rest of Europe; contemporary narrative sources paint a horrifying picture of these years that includes surplus rain, harvest failures, high prices, rampant hunger, inferior substitute foodstuffs, diseases, and even cannibalism.\textsuperscript{18}

How do the matter-of-fact demesne accounts refer to these extreme weather events? The account of the agricultural year 1314/1315 disproportionately mentions rain and its consequences. Titow's compilation for this year is impressive, stretching over more than one full printed page. The accounts for this year include far more references to weather than those of any other agricultural year.\textsuperscript{19} The examination of the relevant pipe roll, however, provides a more differentiated picture. The accounts are recorded on twenty-eight parchment membranes.\textsuperscript{20} The account of the manor Waltham St. Lawrence, situated in Berkshire, for example, is written down on the recto and dorso side of membrane 15 (Figure 1). The name of the manor marks the beginning of the entry, which opens with the cash revenues and expenses of the manor. The revenues resulted from rent, the sale of agricultural products, and various fines, while expenses were incurred for the purchase, maintenance, and repair of ploughs, tools, carts, and buildings. This section includes additional costs and wages for animal husbandry and harvest labor. The second part of the account is a detailed overview of the different grains, animals, and products in


\textsuperscript{19} Titow (note 6), pp. 385–386.

\textsuperscript{20} Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15).
Figure 1: Account for the manor Waltham St. Lawrence in the Winchester Pipe Roll for 1314/15: Winchester, Hampshire Record Office, 11M59/B1/70, m. 15r.
stock on the manor. The account thus provides information on cash revenue, expenses, and inventory – in other words, on the overall economic situation of the manor.21

These different parts of the account are divided into subsections marked by distinctive bold headings in the text. Glosses in the margins of the membranes allow for a better orientation in the document. The section entitled exitus manerii or “issues of the manor” is the focus of the following analysis.

On the manor Waltham St. Lawrence, heavy rains and subsequent flooding made it impossible to rent out the pastures. The revenue from renting the pastures of the manor was noted in the section exitus manerii, which records the name of the pasture and the money received. Recurring references to rain in 1314/1315 and its consequences appear in this context: “And eight penny from the pasture in le Brokmede rented out after mowing and not more because of the heavy flooding by water.”22 Two lines further down, the entry remarks: “From the pasture in le Brokmede nothing this year, because it was full of water.”23 Apparently, rainwater had flooded the pasture, preventing its use and the collection of rent, which diminished the cash revenue of the manor. This correlation is clearly described in the account.

So far, two of the short quotes from Titow’s compilation have been localized here by referencing the original document. Examining the entire pipe roll allows for an interpretation of the references to weather and its consequences in a wider context. Looking at the account as a whole reveals that weather is just one of many reasons for reduced or missing revenue. In Waltham St. Lawrence, only one of seven pastures was negatively affected by the weather impacts of 1314/1315. Revenues for some other pastures remained constant; in other cases of diminished or missing revenues, the account provided other justifications.24 The situation is similar for the pastures on the other Winchester manors and in the agricultural years of 1313/1314 and 1316/1317. The wording of the references to the weather events and their consequences changes

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21 Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 15r–15d. See the account of the manor for 1301/02 in: Pipe Roll 1301–02 (note 7), pp. 185–188. For demesne accounts in the beginning of the Fourteenth century in general see Paul D. A. Harvey, Manorial Records (Archives and the User 5), London 1984, pp. 31–35.

22 Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 15r (Waltham St. Lawrence): Exitus manerii: [...] Et de viii d. r. de pastura in la Brokmede post falcationem vendita et non plus propter magnam habundantiam aque.

23 Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 15r (Waltham St. Lawrence): De pastura in la Brokmede nichil hoc anno, quia plenum [sic!] aque.

24 Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 15r (Waltham St. Lawrence): Exitus manerii: [...] Et de xiiii d. r de pastura vendita in la Inghegrove in yeme. Et de vii d. r. de pastura in Selemede in yeme vendita. Et de v s. v d. r. de pastura in Gretle et Unldelughe vendita et non plus, quia pars depastebatur per affros et boves domini. Et de ii s. iii d. r. de pastura in la Ronghegrove in estate vendita et non plus hoc anno propter instauramentum domini. De pastura in Selecroste nichil hoc anno, quia depastabatur per affros domini cariantes fima et per boves domini.
from because of flooding by water (propter inundacionem aque).\textsuperscript{25} over because of heavy flooding by water (propter magnam habundantium aque)\textsuperscript{26} and because of extreme flooding by water (propter maximam inundacionem aque)\textsuperscript{27} to because of very extreme flooding by water (propter nimiam habundantium aque)\textsuperscript{28} to indicate different degrees of flooding. Generally, just one or two pastures of a manor were affected, never all of them in a single year. In 1315/1316, only one of eleven pastures of the manor Adderbury was affected by rain.\textsuperscript{29} Other explanations appear just as often as the weather impacts. The most common explanation for a pasture having not been rented out was that the bishop’s cattle and sheep had been grazed there. As the pipe roll for 1301/1302 shows, this is the dominant explanation in years without extreme weather events, too.\textsuperscript{30} When cattle were driven to the pastures because their usual grounds were flooded, this is clearly stated in the account. So, for example, for Pillingbere in 1314/1315: “The reeve Alexander de Ponte renders account for nineteen shillings and nine and a halfpenny from the pasture in Pillingbere and not more this year because the draught animals from the manors in Weregrave, Culham, and Waltham St. Lawrence grazed here, for their usual pastures were flooded by water.”\textsuperscript{31} From the agricultural year 1315/1316 onwards, another issue appears in the accounts: on some manors, the reeves could not find any tenants and therefore had to record missing revenue. This happened, for example, in Wittney in 1316/1317: “Nothing from the pasture behind the manor house this year, because no one wanted to rent it as there were too many pastures for rent.”\textsuperscript{32} This might be the result of an overall price increase during the famine years that required the re-allocation of money which had been used to rent pastures.

It is remarkable that these sections about rent for pastures include very nearly all the references to weather conditions and their consequences in regards to income. The only exception is a reference to peat production in Downtown, where there was no revenue from peat in 1315/1316.\textsuperscript{33} Surprisingly, the sections on the sale and inventory of grain do not mention weather impacts at all, even though extreme weather

\textsuperscript{25} Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 11d (Adderbury).
\textsuperscript{26} Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 13d (Morton).
\textsuperscript{27} Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 4d (Downton).
\textsuperscript{28} Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 15d (Pillingbere).
\textsuperscript{29} Winchester, Hampshire Record Office, 11M59/B1/71 (1315/16), m. 17r (Adderbury): Exitus manerii: [...] De pastura in Muchelham nichil hoc anno propter inundacionem aque.
\textsuperscript{31} Winchester, Hampshire Record Office, 11M59/B1/70 (1314/15), m. 15d (Pillingbere): Exitus manerii: Alexander de Ponte prepositus reddit computum de xix s. ix d. ob. r. de pastura de Pillingbere vendita et non plus hoc anno, quia averia maneriorum de Weregrave, Culham et Waltham [St. Lawrence] depastebantur in eadem pastura propter nimiam habundantionem aque existentem in pasturis dictorum maneriorum.
\textsuperscript{32} Winchester, Hampshire Record Office, 11M59/B1/72 (1316/17), m. 1r (Wittney): Exitus manerii: [...] De pastura retro curiam nichil hoc anno, quia nullus eam locare voluit propter habundaciam pasture in patria.
\textsuperscript{33} Winchester, Hampshire Record Office, 11M59/B1/71 (1315/16), m. 7d (Downton): Exitus manerii: [...] De turbis nichil hoc anno pro tempore pluvioso.
events could devastate grain production. Titow calculated yields of thirty-six percent below average for 1314/1315 and forty-five percent below average for 1315/1316.\textsuperscript{34} Nevertheless, no explanation was necessary in this case, considering the circumstances in which these accounts were compiled: at the end of the agricultural year, the reeves answered personally to the bishop’s administration about the revenues of the last year. After the account had been reviewed and audited as deemed necessary, the details were recorded in the pipe roll. As all the parties involved were aware, grain yields were extremely volatile depending on a variety of factors. If enduring rainfall during the previous summer had negatively impacted the grain harvest, there was apparently no need for detailed explanations. The general weather conditions of the previous months would have been common knowledge among the reeves and the officials of the episcopal administration. Rising grain prices were an important consequence of these events.\textsuperscript{35} As a result, large-scale producers like the bishop of Winchester profited enormously from such developments and had little reason to mention the weather or complain about it.

The income side of the demesne accounts thus generally mentions weather and its consequences only in the context of explaining reduced or missing revenues from pasture leases. The episcopal administration held certain, fixed expectations for this element of the manor’s income, and the reeve was responsible for providing detailed information for any deviation from these expectations.

This close control over the pasture leases is a product of the historical development of the direct management of the bishop’s estates dating back to the twelfth and thirteenth century: unlike their counterparts in continental Europe, landowners in England stopped renting out their lands to tenants; bishops, cathedral chapters, lay magnates, and later the king himself were driven by the fear of inflation and alienation of the property to abolish the long-term lease of land to individual tenants. On the one hand, this measure aimed to prevent financial losses due to currency devaluation – an imminent danger when long-term leases fixed rents. On the other hand, landowners’ growing difficulties to prove ownership in the developing English judicial system made the alienation of the property a real danger, as well, in cases where a tenant’s family had held a manor for generations. As a result, the owners started to manage the cultivation their land themselves in a system of direct management that took advantage of the labor service obligations owed them. Peasants had to work on their lord’s estates and the resulting harvest was sold on the local market. In addition, smaller parcels of land were rented out with short-term contracts to prevent competing claims to the property rights.\textsuperscript{36} From this point onwards, unfree peasants

\textsuperscript{34} Titow (note 6), pp. 385–386.
\textsuperscript{35} Ibid., p. 386.
produced agricultural goods on the Winchester manors under the close control of the bishop’s administration. As the first link in the chain of command in this system, the reeves were responsible for the single manors and had to explain what had happened on their manors during the agricultural year to the episcopal administration, which recorded these accounts in the pipe roll. In this context it is understandable that the accounts on pasture leases required more explanations than other parts of the manor’s production. The central administration in Winchester was seemingly concerned about the potential for losses and alienation associated with the independent leasing out of the pastures organized by the reeves. As a result, they expressed precise expectations for the rent income from the pastures and expected the reeve to meet these expectations or justify his failure to do so. The account of the manor in Esher for the year 1320/1321, for example, in a report of lacking revenue, clearly states the expectation that the pasture in question should incur an income of six pennies.\textsuperscript{37} If it was not possible to meet the administration’s expectations, the reeve had to offer an appropriate and convincing justification. Adverse weather conditions and their consequences were possible justifications, which explains the references to weather in the Winchester Pipe Rolls. This also raises the question as to the reliability of this historical weather data: although its acceptance can be read as a certain contemporary acceptance of the account as feasible, these accounts were ultimately part of an argument in the seigniorial discourse described above. Paul Harvey rightly advised caution for the analysis of demesne accounts in general: “The purpose of manorial accounting was to establish the state of reckoning between lord and local official: we should never take for granted that it records what really happened on the manor.”\textsuperscript{38} This caution should be kept in mind when looking at the references to weather in the Winchester Pipe Rolls.

This is not to say that the references to weather and its consequences in the Winchester Pipe Rolls were not based on the observation of actual environmental impacts. These references, however, served as an argument during the rendering of the account, and they were noted almost exclusively in one section of the pipe roll. This should be kept in mind when using these sources to reconstruct past weather events. Even seemingly matter-of-fact accounts are characterized by narrative and communicative patterns that require analysis. The relationship between lord and subjects is an important factor to consider. References to weather and its consequences only exist in accounts of those manors that were managed directly by the lord – e.g., the estates of the cathedral chapter of Norwich in East England or of Battle Abbey in

\textsuperscript{37} Winchester, Hampshire Record Office, 11M59/B1/76 (1320/21), m. 18r (Esher): \textit{Exitus manerii: [...] De pastura in la Fitch, que solebat vendi pro vi d., [...] nichil hoc anno, quia nulli venerunt emptores causa morine bestiarum.}

\textsuperscript{38} Harvey (note 21), p. 34.
The accounts of estates that were not managed directly, but rather leased out – e.g., the manors of Bolton Priory in the north of England – do not refer to the weather at all – even in the extreme years from 1315 to 1317. This highlights just how important the seigniorial, social, and economic circumstances were in the creation of these documents. In the end, they give us mainly insights into these circumstances, but hardly any information on the influence of the weather impacts on the living conditions of the people living and toiling on the bishop’s land, that were severely hit during the famine years.

### 3 The Narrative Sources

The second part of this contribution discusses the narrative patterns of environmental impacts in two historiographical accounts of the famine years: a chronicle composed allegedly by the monk John of Trokelowe and the *Vita Edwardi Secundi*, written by an anonymous secular cleric. Although both texts mention the famine, their focus is clearly on contemporary politics and events such as Edward II’s wars against Scotland and Wales and the barons’ opposition to the king. The authors are accordingly less interested in the weather events themselves than in the social consequences of inclement conditions.

The author of the *Annales*, presumably St Albans frater John of Trokelowe, offers a nearly contemporary account of the famine years in this work, which dates to the 1330s. Although Trokelowe sympathizes with the baronial opposition against Edward II, he also describes the king far more favorably than any other contemporary chronicle. The tradition of close ties between the monastery of St Albans and the monarch might explain that benevolence. For the year 1315, Trokelowe describes long rainy periods that started in May and lasted until the beginning of September. The text states that the continuous rainfall and lack of sunshine prevented the grain

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43 Grandsen (note 41), pp. 5–7.
from growing and maturing over the summer. The little grain that was harvested had become so wet it had to be dried in ovens. Only then was it possible to process it further and to bake bread. The resulting bread, however, lacked the usual nutritional value, for the sun had not been able to put its strength in the grain; even large amounts of the bread, therefore, left the people eating it hungry.

The monk precisely describes the close correlation between lack of sunshine, abundant rain, harvest failure, and bread quality. In an agricultural society, this was common knowledge shared by everyone, including the educated elite. Trokelowe's account of the weather events is factual, lacking any metaphysical dimension. The rainfall is seen as a weather phenomenon and not as divine punishment. He does not interpret weather as having been caused by an external power but simply describes its immediate consequences for the agrarian production.

The social consequences of the harvest failures, however, are judged on a moral level. Criticizing the high prices for food, Trokelowe condemns the rich, the thieves, and all others who act unfairly and unlawfully during the ensuing crisis. He is especially critical of lay and ecclesiastical princes who had curtailed their almsgiving or dissolved their courts, which forced former servants to beg, rob, and steal, and ultimately fomented crime and social unrest in the broader society, as well. In the end, this narrative alludes to a link between the famine conditions, the king’s wars, and an Old Testament prophecy (Jeremiah 14:18) which describes a vision of “the ravages of famine” among city dwellers and “those slain by the sword” in the country. This is the only explicit biblical reference in Trokelowe’s account of the famine years.

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45 Ibid., p. 93: *Sed vix ad dictam diem Nativitatis pro pane coquendo colligi poterant, nisi prius ad desiccandum in clibanos mitterentur. Versus finem autumni, ipsa caristia in parte fuerat mitigata, sed circa festum Natalis Domini totaliter redivbat. Nec habebat panis robur nutritivum, seu virtutem substantiam, more solito in se, pro eo quod grana a calore solis aestivi nutrimentum non habebant. Unde comedentes ex eo, licet magnum exinde sumerent quantitatem, brevi elapso intervallo famelicci remanebant.*

46 Ibid., p. 93: *Nec est abigendum, quin paupers famer et inedia contabescerent, si divites post refectiones opulentas continuo esurirent. Huiusmodi igitur fame prevalente, tam magnates quam religiosi cucuriae suas restringebant, solitas elemosynas subtrahebant, familias suas minusuebant. Unde illi a curia sic amoti, vitam delicatam ducere consueuti, foderie nesciebant, mendicare erubescebant, penuria tamen cibi et potus devicti bona aliens sitiebant, caedibus et rapinis intendentes. Tot autem effecti sunt infides, quod in pace vivere non permiserunt fideles.*

In his account of 1316, Trokelowe highlights the economic consequences of the enduring rain, especially on the soaring prices for grain and salt, which both had risen to thirty shillings in June and to forty shillings by August. To underline the intensity of the famine conditions, Trokelowe describes how the population resorted to drastic coping strategies such as eating horse and dog meat. Furthermore, he quotes rumors of cannibalism. Even the king’s court had allegedly struggled to buy enough bread while staying at St Albans. The famine affected all strata of society. In an interesting paragraph, Trokelowe explains that the main reason for the rising death toll in England was not malnutrition itself but infectious diseases. This corresponds with modern insights into famine mortality. In this context, weather impacts are once again of importance: according to the Annales, physicians could not prepare effective medicine to treat and inhibit the spreading diseases because the unfavorable weather conditions destroyed the herbs usually used for this purpose.

The monk of St Albans gives a clear and precise account of the weather events. In the narrative of the Annales, weather is a natural phenomenon, which, combined with other economic and political factors, leads to severe famine conditions. The text focuses on the social consequences of the hunger crisis and discusses the famine’s moral and metaphysical dimensions rather than clearly describing the weather events themselves. The Vita Edwardi Secundi offers an entirely different perception and interpretation of the extreme weather events. Probably written during the same period by an

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49 Ibid., p. 95: Ut posteris liqueat, quanta duritia vivendi per Angliam tunc erat, paucus, priusquam mandatum regium exprimatur, huic scripto duxi inserere. Quatuor autem denariatus de grosso pane non sufficientem uni simplici homini in die. Carnes quidem communes, et ad vescendum licitae, strictae erant nimirum; sed carnes equinae pretiosae eis fuerant, qui canes pingues furabantur; et, ut multi asserebant, tam viri quam mulieres parvulos suos, et etiam alienos, in multis locis furtim comedebant. Sed, quod horrible est ad futororum notitiam perducere, incarcerate etiam fures inter eos recenter venientes in momento semivivos devorabant.

50 Ibid., p. 92: Unde terra tanta penuria premebatur, quod, cum Rex apud Sanctum Albanum in festo Sancti Laurentii [10. August] proximo sequente declinaret, vix poterat panis venalis, pro sua specialis familiae sustentatione, inveniri.

51 Ibid., p. 94: Ipsa igitur fame totam terram sic opprimente, mortalitas hominum subsecuta est. Tot moriuntur egeni, quod vix sufficienti vivi ad sepulturam mortuorum. Morbus enim dysentericus, ex corruptis cibis conceptus, ferre omnes maculavit; quem sequebatur actua febris, vel pestis gutturusa.

52 Ibid., p. 94: Nec potuit in hac pestilentia contra praedictos morbos prudentia physicorum, prout antiquitus solebat, aliquod conrum in arte sua reperire remedium. Herbae enim medicinales, quae mortalitati tempore levamen languidis solebant confere, propter aeris intemperiem, et inordinatum elementorum collisionem, contra suam naturam degeneratae, virtus pro virtute reddebat.
anonymous secular clergyman, the *Vita* is not a traditional chronicle but an elaborate literary work full of biblical, canonical, and historical references. The narrative concentrates on the political events of Edward’s reign. It views the king’s character und his actions critically, and the author’s support of the baronial opposition is apparent. Nevertheless, Edward remains the center of the English kingdom, and the text does not fundamentally challenge his position. The author’s different, sometimes contradictory, perspectives on the king and his reign can be explained by the successive writing of the four parts of the *Vita* in 1313, 1315, 1318 and 1320. Unlike in John of Trokelowe’s account, the description of the famine years here is dominated by contemporary political developments, especially the war against the Scots, the rebellion of Llywelyn Bren in Wales, unrest at Bristol, and the convocation in October 1316.

The extreme weather events and their consequences are dealt with in three rather short paragraphs. For 1315, the author stresses the divine origin of the rain, which he interprets as punishment for the arrogance and wickedness of the English people. The overabundance of rain is referred to in a summary description highlighting the detrimental effects on grain and animals. Like Trokelowe, the author of the *Vita* links the resulting harvest to a vision of the prophet Isaiah, in which ten acres of vineyard yield only a handful of grapes, and thirty bushels of seed yield only three bushels at the harvest (Isaiah 5:10). The *Vita* integrates the weather events into a metaphysical interpretation of various problems confronting the English people. A detailed description of the rain is therefore unnecessary; the short characterization as a horrible act of God suffices. The paragraph ends with the author’s doubts concerning the willingness of his countrymen to change their actions and habits and his fear of further calamities. In the narrative of the *Vita*, only the prayers of the English Church prevented the kingdom’s downfall.

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57 Ibid., pp. 110–112: Ulde autem nobis timendum est ne, si Dominus post hec flagella incorribles nos inueniat, homines et pecora simul disperdat; et constanter credo quod, nisi intercederet Anglicana religio, dispersi fuissemus elapso tempore molto.
For the year 1316, the *Vita* highlights the economic and social consequences of the extremely rainy weather and describes the famine as the severest natural disaster to impact English society in a century.\(^{58}\) This stark picture stands in sharp contrast to the small amount of attention the text devotes to this event, however. The *Vita* paints a hopeless image of the situation, which includes the symbolic high price of forty shillings per bushel of wheat in London and thirty shillings in the rest of the kingdom, as well as remarks on the connection of hunger, diseases, and death.\(^{59}\) Furthermore, the author reports on unclean substitute food such as dog and horse meat being eaten in the far north of England, where frequent Scottish raids presented an additional challenge for the population.\(^{60}\) After once again criticizing the morals of the English people, the *Vita* provides an alternative “scientific” explanation for the extreme weather events; it refers to learned experts who provide an astrological-meteorological explanation based on the negative effects of Saturn as the cause of the detrimental weather. As planets continue in their course, these experts propose, Saturn will be followed by Jupiter, bringing far more favorable weather and restoring the usual conditions.\(^{61}\) The author is familiar with astrological ideas popular at the University of Oxford at this time\(^ {62}\) and uses this natural cause as a narrative counterpoint to his metaphysical interpretation of the events. In the framework of medieval astrology, this was not a contradictory but rather a complementary explanation: in this interpretation, God influenced the weather through the stars, which followed the rules of natural physics.\(^ {63}\)

For the year 1318, the last paragraph mentioning the famine deals with the end of the extreme weather events and the return to the usual order. In combination with the end of the wars in Scotland and Ireland and with Edward’s reconciliation with the public.

\(^{58}\) Vita Edwardi Secundi (note 53), p. 120: *Transeunte solemnitate Paschali cepit caristia bladi uehemen- ter augeri. Non est uisa temporibus nostris in Anglia nec audita centum <annis> retroactis tanta caristia.*

\(^{59}\) Ibid., p. 120: *Nam Londoniis et locis uicinis wendebatur modius triciti pro quadraginta denarisis, et in aliis partibus terre ubi minor erat concursus hominum triginta denarisis erat commune precium. Porro durante peniuria creuit et fames ualida et post famem dura pestelencia, ex qua moriuntur in diversis locis plus quam milia.*

\(^{60}\) Ibid., p. 120: *A quisbusdam eciam audiui relatum, quod in partibus Northumbrorum canes et equi et alia immunda sumebantur ad esum. Hii enim propter frequentes incursus Scotorum maiori tedia labo- rant, quos maledicti Scoti suis uictualibus cotidie spoliabant.*

\(^{61}\) Ibid., p. 122: *Dicunt tamen sapientes astrologie has celi tempestates naturaliter evenisse; Saturnus enim securus et frigidus asperitates procreat inutiles seminibus; triennio iam regnans cursum consum- mavit, et sibi mitis Jubiter ordine successit. Porro foue regnante cessabunt pluuiales unde, ualles habun- dabunt frumento et campi replebuntur ubertate.*


barons, this is interpreted as the beginning of a promising future for England and its people. References to the Bible are made here, too: the events of the famine are compared to description of the siege of Samaria in the Old Testament (2 Kings 6). During this siege, a steep price rise occurred and the inhabitants of the city resorted to cannibalism. After the city was liberated with the help of God, prices returned to normal levels, and social order was restored in Samaria. A similar course of events took place in the English kingdom of the fourteenth century, according to the Vita. Juxtaposing these medieval weather events and their economic and social consequences with a biblical episode embeds them in a wider typological and eschatological framework. Unlike Trokelowe’s account, the anonymous work makes no direct reference to cannibalism in England during the famine years, but the allusion to the events during the siege of Samaria might hint at the idea that cannibalism also occurred in fourteenth-century England, even if the author only cautiously implies this.

The Vita Edwardi Secundi uses weather as part of a metaphysical interpretation of the political events in England at the beginning of the fourteenth century. Weather and its consequences transpired on the same level as other events of the time, including wars, civil unrest, and baronial opposition. Since weather impacts are not conceptualized as events of a different magnitude, their descriptions are not very detailed or elaborated. In the narrative of the work, they are simply yet another scourge facing English society.

4 Conclusion

The sources discussed here record a variety of references to the weather from diverse contexts; there are a number of speakers and motivations for these records. While the reeves of the Winchester manors used weather to explain diminished revenues in specific sections of the agricultural account, the authors of the narrative sources followed a different path. John of Trokelowe concisely describes the weather events as natural phenomena without any metaphysical dimension. He judges the human reactions and their economic and social consequences at a moral level. The Vita Edwardi Secundi, on the other hand, includes weather in a portfolio of divine punishments directed at English society. The details of the weather events themselves are

64 Vita Edwardi Secundi (note 53), pp. 154–156.
65 Ibid., pp. 154–156: <Tercio cessauit> sterilitas illa que diu nos afflixit, et habundancia omnium bonorum terram Anglorum multiplicant fecundauit. Modius tritici, qui anno preterito pro quadraginta denariis uendebatur, hodie pro sex denariis emptori libenter offertur. Sic olim tamdiu obsessa Samario, ut mater uesceretur pro penuria uictualium, recuperauit diuina gracia. Nam capud asini, quod octoginta aureis pridie uendebatur, omnibus inmundum in crastino reputationum erat, et modius simile pro statere uno uemundatus, sicut perdixerat uir Dei Heliseus.
66 MARVIN (note 41), p. 78.
less important in this context than the harshness of the resulting conditions for the English people.

Any examination of the intertwinement of environment and society in the fourteenth century must begin with the careful analysis of references to natural events in the sources. The context in which these sources were created is essential to avoiding problems which they could pose for historical research. By analyzing the communicative setting and the narrative patterns of accounts and historiography, historians can reach other insights than they can, for example, by concentrating on the reconstruction of grain yields or the fourteenth-century weather conditions. The questions formulated in the introduction are important when interpreting references to natural impacts in historical sources. Only after the texts referring to weather events and the context of their creation have been critically assessed, it is possible to address broader questions of societal reactions to environmental impacts in a meaningful way. To achieve this, environmental historians must base their research on detailed analysis of the perceptions of the environment in the sources examined. This is the first step towards writing a definitive environmental history of fourteenth-century England.