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VINICIUS MARINO CARVALHO

War, hazards, and economic degradation in Thomond, 1276-1318:
agent-based approaches to the Uí Bhriain civil war

Revised Version

São Paulo

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Thesis presented to the Post-graduate Program in Economic History of Universidade de São Paulo's Faculty of Philosophy, Languages and Literature, and Human Sciences, for the attainment of a doctoral degree in Economy History.

Supervisor: Prof. Dr. Marcelo Cândido da Silva
(Universidade de São Paulo)

Co-supervisor: Prof. Dr. Peter Crooks (Trinity College Dublin).

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Examination committee

Prof. Dr. Sparky Booker **Instituição:** Dublin City University

Julgamento: Aprovado **Assinatura** _____

Prof. Dr. Adrien Bayard **Instituição:** Université d'Artois

Julgamento: Aprovado **Assinatura** _____

Prof. Dr. Igor Salomão Teixeira **Instituição:** UFRGS

Julgamento: Aprovado **Assinatura** _____

Prof. Dr. Marcelo Cândido da Silva **Instituição** USP

Julgamento: Não votante **Assinatura**  _____

ENTREGA DO EXEMPLAR CORRIGIDO DA DISSERTAÇÃO/TESE

Termo de Anuência do (a) orientador (a)

Nome do (a) aluno (a): Vinicius Marino Carvalho

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Nome do Prof. (a) orientador (a): Marcelo Cândido da Silva

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*“Clann Cais’s fidchell set is defective
One of the green-armed pieces is missing
A deed from which no good fame many will get,
Defective is the fidchell set.
Unwise is the dog-eats-dog game,
A game that is often ruined,
It often takes the lustrous board.
It is a great waste and a horror
To capture a piece from the righteous set,
In a church to have it dwell,
To kill a man and there lay it to rest,
To shed blood does not belong to fidchell.
This pure fallen man is
Lochlainn, unseemly is to feast his loss.”*

- Seán Mac Craith, *Caithréim Thoirdhealbhaigh*.

Abstract

Between 1276 and 1318, English magnates unsuccessfully attempted to establish a lordship in the Irish kingdom of Thomond, Southwestern Ireland, by exploiting a dynastic feud between the then ruling lineage, the Uí Bhriain. The conflict coincided with a series of extreme events that beset Western Europe in the late 13th and early 14th centuries, such as the beginning of the Little Ice Age and the Great European Famine of 1315-1322. The goal of this thesis was to evaluate to which extent the economic degradation at the turn of the 14th century contributed to the failure of the English efforts to politically dominate Thomond. Based on analyses of 13th and 14th centuries written sources, Early Modern cartographical material, and archaeological surveys and excavation reports, I developed an agent-based model (ABM) called ThomondSim, which I used to run experiments measuring political and economic outcomes across different counterfactual scenarii. I also developed a serious board game, *The Triumphs of Turlough*, which I used to validate ThomondSim's historical model and investigate minute and/or non-systematic processes that escaped the "bird's eye" view provided by the ABM. A quantitative analysis of the experiments' results interpreted in light of insights from *The Triumphs of Turlough*'s playtesting sessions found some correlation between late 13th economic degradation and the fortunes of belligerent factions in the wars of 1276-1318, although it was not expressive enough to have been a crucial factor in the outcome of the conflict.

Keywords: Gaelic Ireland, Medieval Ireland, Agent-Based Modeling, Serious Games, Digital Humanities, History of Thomond

Resumo

Entre 1276 e 1318, magnatas ingleses tentaram, sem sucesso, estabelecer um senhorio no reino irlandês de Thomond, sudoeste da Irlanda, aproveitando-se de uma disputa dinástica envolvendo a então linhagem reinante, os Uí Bhriain. O conflito coincidiu com uma série de eventos extremos que afetaram a Europa Ocidental no final do século XIII e início do século XIV, como o início da Pequena Era do Gelo e a Grande Fome Europeia de 1315-1322. O objetivo dessa tese é avaliar até que ponto a degradação econômica na virada do século XIV contribuiu para o fracasso das tentativas inglesas de dominar politicamente Thomond. Baseando-me em análises de fontes escritas dos séculos XIII e XIV, material cartográfico da Primeira Modernidade e *surveys* e relatórios de escavação arqueológicos, desenvolvi um modelo baseado em agentes (ABM) chamado ThomondSim, que utilizei para realizar experimentos, medindo diferenças em variáveis econômicas e políticas no curso de diferentes cenários contrafactuais. Também desenvolvi um *serious game* de tabuleiro, *Os Triunfos de Tarlac*, que utilizei para validar o modelo histórico de ThomondSim e investigar processos não sistemáticos e/ou específicos que escapavam ao panorama amplo oferecido pelo ABM. Uma análise quantitativa dos resultados dos experimentos, interpretada à luz de observações provenientes das sessões de teste de *Os Triunfos de Tarlac*, encontrou alguma correlação entre a degradação econômica do período e o sucesso das facções beligerantes das guerras de 1276-1318, embora não expressiva o suficiente para ter sido um fator crucial no desenlace do conflito.

Palavras-chave: Irlanda Gaélica, Irlanda Medieval, *Agent-Based Modeling*, *Serious Games*, Humanidades Digitais, História de Thomond.

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List of Abbreviations

AC	Annals of Connacht
AClon	Annals of Clonmacnoise
AFM	Annals of the Four Masters
AI	Annals of Inisfallen
ALC	Annals of Loch Cé
AU	Annals of Ulster
CT	<i>Caithréim Thoirdhealbhaigh</i>
LIA	Little Ice Age
MCA	Medieval Climatic Anomaly

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Introduction

History, to a great extent, is a discipline driven by fear. Unable to predict the future, unsure of the extent of our own agency, tormented by news of impending catastrophes, we look to the past in search of cautionary tales, precedents, sources of meaning, if nothing else; anything that can light, if only dimly, our path ahead.

To Goddard Orpen, the great unionist historian of early 20th century Ireland, that fear was the anxiety of being a loyal British subject left behind in an Ireland on the brink of revolution. His magnum opus, *Ireland Under the Normans*, was as much a herculean work of pioneering scholarship on the two centuries following the 1169 English invasion of Ireland as an apologia of English colonialism, a process which, in his assessment, elevated Ireland from an politically disunited and technologically underdeveloped backwater into a land of and social advances brought forth by a “*Pax Normannica*”.¹ Despite his vow “not to allow any modern political nostrum to colour the presentation of the picture drawn”², it is obvious his narrative had the 20th century in mind. Between 1911 and 1920, when the first and last volumes of *Ireland Under the Normans* were published, Ireland was shaken by at least two major episodes of political violence: the Easter Rising of 1916, then the Irish War of Independence (1919-21). A third conflict, the Irish Civil War (1922-23), was soon to follow. Orpen made no secret of his uneasiness with the future. In letter written to fellow historian Edmund Curtis in 1923, he claimed that the ‘Irish Resurgence’ – a period when the reach of the English Lordship shrunk and much of its former territory fell back into Irish hands – was

a risorgimento that led not to national unity, but to the chaos and retrogression of the 15th century. Well, they [i.e. the Irish] have got their ‘Great Deliverance’ now, and all I can say is Heaven help Ireland!”³

1 ORPEN, Goddard H., *Ireland Under the Normans, Vol.2*, Oxford: Clarendon Press, 1911, p. 323.

2 ORPEN, Goddard H., *Ireland Under the Normans, Vol.3*, Oxford: Clarendon Press, 1920, p. 10.V iii, p. 10

3 TCD, MS 2452, no. 10 (G.H.O., Monksgrange, Enniscorthy, to E.C., 19 Mar. 1923), apud CROOKS, Peter, *The Lecky Professors, in: Government, War and Society in Medieval Ireland: Essays by Edmund Curtis, A.J. Otway-Ruthven and James Lydon*, Dublin: Four Courts, 2008, p. 30.

In light of this background, it is difficult not to read his praise of the medieval English magnates who fought to pacify the Irish as a reflection on his own place within an increasingly hostile political *milieu*.⁴ One such magnate was Thomas de Clare, lord of Thomond. Between 1276 and 1318, he and his son, Richard, participated in a costly, protracted, and ultimately futile war in an attempt to carve out a lordship in southwestern Ireland.

In the second half of the 13th century, the Irish kingdom of Thomond (from the Irish *Tuadhmunhan*) became a hotspot of political trouble for the English Lordship of Ireland. Like many royal Gaelic families of the period, Thomond's ruling lineage, the Uí Bhriain, was not above cooperating or paying tributes to the English if those actions yielded some political payoff. With the death of king Conchobhair 'na Siúdaine' Ó Briain in 1268, however, the sept flared in a major civil war between the descendants of his sons Taidhg and Brian Ruad. The disorder became serious enough to convince Robert de Muscegros, their nominal English overlord, to relinquish his holdings in the region. King Edward I then arranged for one of his allies, Thomas de Clare, to take over his place and pacify the Uí Bhriain. For the next four decades, the de Clares held on to a precarious position, never managing to expand their territory or exploit 'divide and rule' tactics to effectively weaken their Irish opponents. Richard, the last de Clare of his line to take the fight to the Irish, was killed in battle against the descendants of Taidhg Ó Briain in 1318. In the years that were to follow, Richard's only male son passed away, his main castle at Bunratty fell into disrepair, and his lands were taken over by the Irish, never to return to English hands before the Early Modern period.

In Orpen's words, Thomas and Richard de Clare "were [no] other than brave and chivalrous Norman knights, [...] belong[ing] to a class impregnated with the best traditions of feudalism."⁵ Yet, like the Irish of 1916, who would rather secede from Britain than accept its rightful place within the Empire, the de Clares were surrounded by "turbulent barons" who "had become much more akin to the Gael in sentiment and manners" and had no qualms in fighting alongside the Irish against their fellow English if it suited their immediate needs.⁶ In the end, to explain the "failure of England for

4 For the scathing (and not entirely unjustified) nationalist responses to Orpen's ideas, see DUFFY, Seán, Goddard Henry Orpen, Ireland under the Normans, 1169-1333 (1911-20), **Irish Historical Studies**, v. 32, n. 126, p. 246–259, 2000.

5 ORPEN, Goddard Henry, **Ireland Under the Normans, Vol.4**, Oxford: Clarendon Press, 1920, p. 94.

6 *Ibid.*, p. 94–95.

nearly three centuries to maintain the position that had been won in Ireland”, one had only to look at the “want of solidarity among the English settlers”.⁷

Over a century has passed since the publication of *Ireland Under the Normans*. Nowadays, Orpen’s political sensibilities and judgmental conclusions read, at best, as a historical curiosity. Yet, our own future is no less uncertain, menacing, or opaque. And we keep revisiting the lives of the likes of Thomas de Clare and his contemporaries in an effort to give credence to our beliefs and bring solace to our apprehensions.

In recent years, few crises have sparked our imagination with as much gravitas as the one set in motion by anthropogenic climate change. From environmental degradation to fears of increased food insecurity, its consequences are already being felt throughout the globe. Among the nations where such concerns have gained more traction, this new climate anxiety can be measured by the inclusion of ‘green’ topics in the programs of mainstream political parties, the investment in sustainable energy sources, the advocacy for changes in personal habits (like meat consumption and travels by airplane), the production of post-apocalyptic fiction, and the emergence of civil disobedience movements. As Jean-Pierre Devroey argued, our collective fear of a climate-related collapse has “awoken societal anxieties and political concerns with an acuteness that seemed to have disappeared with the end of the Cold War”.⁸ His assessment was not merely metaphorical. In 2007, the Doomsday Clock, a report originally created by the US-Based Bulletin of the Atomic Scientists to raise awareness of the possibility of a nuclear holocaust, added climate change to its list of “human-made threats to civilization.”⁹

It is thus understandable, and perhaps unavoidable, that our generation would follow our predecessors in looking into the past for answers. In the suggestively titled *The Little Ice Age: How Climate Made History 1300-1850*, Brian Fagan declared that “humanity has been at the mercy of climate change of its entire existence” and that studying past instances of the phenomenon can be a source of “precedent as we look into the climactic future.”¹⁰ Kyle Harper’s *The Fate of Rome: Climate, Disease and the*

⁷ *Ibid.*, p. 84.

⁸ DEVROEY, Jean-Pierre, **La Nature et le roi: Environnement, pouvoir et société à l’âge de Charlemagne**, Paris: Albin Michel, 2019, p. 57.

⁹ BOARD OF DIRECTORS, 2007 Doomsday Clock Report, **Bulletin of the Atomic Scientists**, p. 66–71, 2007.

¹⁰ FAGAN, Brian M., **The Little Ice Age: How Climate Made History 1300-1850**, New York, NY: Basic Books, 2001, Preface, paras 3 and 5.

End of an Empire interpreted the fall of Rome as a “triumph of nature over human ambitions” brought forth by the “undue confidence [...] that the Romans had tamed the forces of wild nature”.¹¹ The bold language of volumes such as these has produced many a bestseller – and more than a few academic backlashes.¹² Without denying either the gravity of climate change or the importance of studying past environmental phenomena, scholars have criticized the tendency of some studies of neglecting regional variations in the intensity of disasters¹³, underestimating the capacity of societies to adapt to changing circumstances¹⁴, as well as subscribing to outdated monocausal explanation models.¹⁵ As Devroey chastised, climate anxiety elevated the environment to a pedestal of “global explainer” not seen since the days of the “natural determinism” of Ancient Greek thinkers like Herodotus and Hippocrates or rationalists from the Enlightenment such as Montesquieu and Hume.¹⁶ For the author, rather than succumbing to hyperbole, we should instead treat environmental, physical, biological, social and institutional phenomena as “independent variables in their own right”¹⁷, and develop “new methodological approaches that allow us to think about the Earth in terms of interactions between the climatic system and the social ecosystems”.¹⁸

Devroey was not the only to advocate for such principles. The popularization of historical climatology has brought forth news types of evidence with which to estimate past atmospheric conditions and vegetation cover, allowing historians to recontextualize

11 HARPER, Kyle, **The Fate of Rome: Climate, Disease, and the End of an Empire: 2**, Illustrated edição. Princeton: Princeton University Press, 2017, p. 4. P. 4

12 For Harper’s work in particular, Cf. HALDON, John *et al*, Plagues, climate change, and the end of an empire: A response to Kyle Harper’s The Fate of Rome (1): Climate, **History Compass**, v. 16, n. 12, p. e12508, 2018; HALDON, John *et al*, Plagues, climate change, and the end of an empire. A response to Kyle Harper’s The Fate of Rome (2): Plagues and a crisis of empire, **History Compass**, v. 16, n. 12, p. e12506, 2018; HALDON, John *et al*, Plagues, climate change, and the end of an empire: A response to Kyle Harper’s The Fate of Rome (3): Disease, agency, and collapse, **History Compass**, v. 16, n. 12, p. e12507, 2018.

13 LJUNGQVIST, Fredrik Charpentier; SEIM, Andrea; HUHTAMAA, Heli, Climate and society in European history, **WIREs Climate Change**, v. 12, n. 2, p. e691, 2021.

14 DEGROOT, Dagomar, Climate change and society in the 15th to 18th centuries, **WIREs Climate Change**, v. 9, n. 3, p. e518, 2018; DEGROOT, Dagomar *et al*, Towards a rigorous understanding of societal responses to climate change, **Nature**, v. 591, n. 7851, p. 539–550, 2021; JORDAN, William Chester, **The Great Famine: Northern Europe in the Early Fourteenth Century**, Princeton: Princeton University Press, 1996, p. 13–14.

15 WARDE, Paul, Global Crisis or Global Coincidence?, **Past & Present**, v. 228, n. 1, p. 287–301, 2015.

16 DEVROEY, **La Nature et le roi**, p. 57.

17 *Ibid.*, p. 13.

18 *Ibid.*, p. 57.

historical records.¹⁹ Landmark projects involving researchers from both the social and natural sciences offered benchmarks for future interdisciplinary collaborations.²⁰ The complex interplay of environmental, economic, cultural and political phenomena has prompted authors to adopt new analytical techniques that combine quantitative and qualitative data analysis; close reading of historical sources with counterfactual reasoning and computer modeling. Researchers across the discipline have revisited seminal historical events of their periods of interest and started to wonder if were not ignoring possible environmental confounders.

In the case of the late 13th and early 14th centuries, the time of the de Clares and the wars in Thomond, this hypothesis is far from novel. As early as 1984, Mary C. Lyons argued that the “worsening climatic conditions of the early years of the fourteenth century” had a significant impact on cereal-based sectors of the Irish economy.²¹ These conditions were symptoms of a more serious and widespread phenomenon she labeled “the great Northern European disaster of 1315-18”.²² Aggravating this precarious state of affairs, the Bruce Invasion, part of the Irish theatre of the First War of Scottish Independence (1296-1328) provoked widespread famine, destruction, and political insecurity throughout the island.²³

In recent decades, the economic upheavals of this period were subject of renewed attention. Perhaps most importantly, the phenomenon is no longer seen as a strictly “Northern European” one. As this literature tells us, during the late 13th and early 14th century the world witnessed a transition between two climate regimes: the Medieval Climate Anomaly (also known in earlier works as the Medieval Warm Period) and the Little Ice Age.²⁴ The shift had a dramatic impact on agriculture and animal

19 BRÁZDIL, Rudolf *et al*, Historical Climatology In Europe – The State Of The Art, **Climatic Change**, v. 70, n. 3, p. 363–430, 2005, p. 15–18; VAN BAVEL, Bas *et al*, **Disasters and History: The Vulnerability and Resilience of Past Societies**, Cambridge: Cambridge University Press, 2020, p. 53–57; BRÖNNIMANN, Stefan; PFISTER, Christian; WHITE, Sam, Archives of Nature and Archives of Societies, *in*: WHITE, Sam; PFISTER, Christian; MAUELSHAGEN, Franz (Orgs.), **The Palgrave Handbook of Climate History**, London: Palgrave Macmillan UK, 2018, p. 27–36.

20 HALDON, John *et al*, History meets palaeoscience: Consilience and collaboration in studying past societal responses to environmental change, **Proceedings of the National Academy of Sciences**, v. 115, n. 13, p. 3210–3218, 2018.

21 LYONS, Mary C., **Manorial administration and the manorial economy of Ireland c. 1200-1377**, Doctoral Thesis, Trinity College (Dublin, Ireland). Department of History, 1984, p. 330. P. 330

22 *Ibid.*

23 *Ibid.*, p. 331.

24 SLAVIN, Philip, The 1310s Event, *in*: WHITE, Sam; PFISTER, Christian; MAUELSHAGEN, Franz (Orgs.), **The Palgrave Handbook of Climate History**, London: Palgrave Macmillan UK, 2018, p. 495–

husbandry. Specifically, it was likely behind a series of back-to-back harvest failures between 1315-17. The episode is a likely cause of a period widespread famine and shortage known as the Great European Famine of the 1315-1322.²⁵ In the English world, these adverse conditions coincided with a series of large-scale wars that were provisioned, at least in part, by cereal siphoned off from the impoverished Lordship of Ireland.²⁶

It is remarkable that the beginning of this period of environmental and economic instability coincides almost perfectly with the nearly forty years during which the de Clares were active in Thomond. Would it be possible that the lineage's ultimate failure in establishing a lordship in the region is connected, to one degree or another, to these unfavorable conditions? Or, at the very least, that the economic degradation caused by the early Little Ice Age, the Great European Famine, and wars being fought by the English Crown had some observable effect on this regional conflict in Thomond?

The goal of this thesis is to cast a new light on the wars of 1276-1318. It attempts to do so guided by considerations drawn from the recent literature on the extreme events of the late 13th and early 14th centuries. To accomplish this task, I built two distinct, yet complimentary analytical models: a computational agent-based model called ThomondSim, and a tabletop serious game of scientific discovery, *The Triumphs of Turlough*. These models comprise a virtual version of Thomond populated by agents representing Irish kings and English magnates, and subject to external effects based on the environmental and economic extreme events of the period. I subsequently used these models to design and run experiments, subjecting this virtual Thomond to two types of scenarios: one modeled on historical evidence, in which extreme events had an effect on the environment, and a counterfactual one in which these calamities never occurred.

Chapter I provides a brief bibliographical overview on the extreme events of the early 14th century, as well as a definition and introduction to the theoretical foundations of both ABM and scholarly serious games. The following two chapters guide the reader

96; CAMPBELL, Bruce M. S., **The Great Transition: Climate, Disease and Society in the Late-Medieval World**, Cambridge: Cambridge University Press, 2016, p. 335–44.

25 KERSHAW, Ian, *The Great Famine and Agrarian Crisis in England 1315-1322*, **Past & Present**, n. 59, p. 3–50, 1973; JORDAN, **The Great Famine: Northern Europe in the Early Fourteenth Century**.

26 LYONS, **Manorial administration and the manorial economy of Ireland c. 1200-1377**, p. 343–52. For the political context behind these wars, Cf. PRESTWICH, Michael, **Edward I**, New Haven/London: Yale University Press, 1997, p. 170–232; 376–400; 469–516; MCNAMEE, Colm, **The Wars of the Bruces: Scotland, England and Ireland, 1306-1328**, East Linton: Tuckwell Press, 1997.

throughout the process of building the analytic models. Chapter 2 is dedicated to the physical and political environment of late 13th – early 14th centuries Thomond, the understanding of which poses several methodological challenges due to how radically the Irish landscape has been altered since pre-industrial times. In its first half, I explore Late Medieval narrative evidence for itineraries and toponyms, archaeological surveys, and Early Modern cartographic material to provide a tentative reconstruction of Thomond’s vegetation cover, routes of transportation, and settlements of military importance. In its second half, I will address the task of adapting this data to both ThomondSim and *The Triumphs of Turlough*. Chapter 3 is dedicated to the agents English magnates and Gaelic kings (or *ríthe*, as they are known in Irish) – who dominated the political landscape of Thomond in the period. Based on evidence from Irish narrative sources and English financial and administrative records, I chronicle the political events leading to the wars of 1276-1318, then outline the *modi operandi* of war, diplomacy, and military logistic employed by these political elites, and formalize them in commands and game mechanics.

Chapter 4 is concerned with the refinement and use of the models themselves. It is divided in three parts. The first walks the reader through the very important steps of verification and validation – i.e. the safeguards that ensure both the ABM and the serious game have been adequately implemented and correspond to historical knowledge. The second part introduces the experiment conducted to generate data from the model. Lastly, the third part is a statistical analysis of its results. The final section, “Discussion”, weights in on the historical implications of the results, and discuss the application of modeling and simulation techniques in history more broadly.

Chapter 1:

Why (and how to) model the wars in Thomond?

1.1. “The great northern European disaster”

“In the early history of the English arms in Ireland” wrote the famous antiquarian Thomas Westropp in 1890 “one episode stands, in a great measure, isolated from other events, with strong personalities on both sides of the combat and noteworthy by its very failure.”²⁷ The episode in question was the war that raged in the Irish kingdom of Thomond between 1276 and 1318. Its personalities were the English baron Thomas de Clare and his descendants, epitomizing the “gallantry and cunning of the Norman”, and the kings of the Uí Bhriain, an Irish lineage who had ruled Thomond for generations with “courage and versatility”, but that was caught up in a civil war the de Clares attempted to manipulate in their favor.²⁸

Westropp may not have seen the forest for the trees, for he failed to mention an even mightier and more capricious personality. According to contemporary Irish sources, both English and Gaels had to contend with alarming environmental conditions. Among the entries of the Irish annals, we find many mentions of severe snowfall and overall bad weather.²⁹ The population of Ireland was beset with famine³⁰,

27 WESTROPP, Thomas Johnson, The Normans in Thomond. Part I., 1275-1287, **The Journal of the Royal Society of Antiquaries of Ireland**, v. 1, n. 4, p. 284–293, 1890, p. 284.

28 *Ibid.*

29 “*Donend mór isin bliadain sin*”. AI 1271.2. MAC AIRT, Séan (Org.), **The Annals of Inisfallen**, Dublin: Dublin Institute for Advanced Studies, 1944, p. 370. “*Snechta 11] ro mhor o Nodlaic co feil Brighde isin mbliadain sin*.” ALC 1282.8. HENNESSY, W.M. (Org.), **The Annals of Loch Cé**, London: Longman & Co., Trübner & Co., Paternoster Row; Parker & Co, Oxford; Macmillan & Co, 1871, p. 490. “*Snechta ro-mor o Notlaic co fel Brigti isin bliadainsin*.” AC 1282.9. FREEMAN, A.M. (Org.), **Annála Connacht: the Annals of Connacht (A.D. 1224-1544)**, Dublin: Institute for Advanced Studies, 1944, p. 174. “*Snacta mor & donen si geurudhsa*.” AI 1226.7. MAC AIRT (Org.), **The Annals of Inisfallen**, p. 390. “*Snechta mhor isin bliadhain sin*.” AU 1315.7. MAC CARTHY, B, **Annala Uladh: Annals of Ulster otherwise Annala Senait, Annals of Senat**, Dublin: Her Majesty’s Stationery Office, 1893, p. 432.

30 “*Ar mor ar dhainbh an bliadhain si do phlaigh & do ghorta*” AU 1263.11 (Actually from 1265). MAC CARTHY, **Annala Uladh: Annals of Ulster otherwise Annala Senait, Annals of Senat**,

scarcity³¹, and “hardships” (*tedmanna*).³² Disease and animal pestilence also abounded, with the cattle population – a crucial cog in the Irish economic machinery – taking a particularly heavy hit.³³ While these troubles were not directly caused by human action, they seem to have been aggravated by relentless warfare, specifically the devastation wrought between 1315 and 1318, when a Scottish army led by Edward Bruce put the English Lordship of Ireland to the torch.³⁴ “[N]ever was a better deed done for the Irish than this” states the Annals of Connacht of the death of the Scottish prince, “For in this Bruce’s time [...] falsehood and famine and death of people filled the country, and undoubtedly men ate each other in Ireland”.³⁵

Cannibalism is a powerful rhetorical device, with which one should always be cautious. Yet, in this particular case, the Annals very likely had a kernel of truth. In the first decades of the 14th century, Northwestern Europe as a whole chafed under a period of scarcity, famine, and cattle pestilence – possibly a panzootic of rinderpest, a viral animal disease with an extremely high mortality rate.³⁶ The combined effect of these hazards had a disastrous effect on agriculture and animal husbandry, with dire consequences to food production. The culmination of such troubles came to be known

p. 334.” *gorta mór isin bliadhain chétna cor mharb sochaidhi do uacht is do ghorta and do dáinibh bocha*” AI 1271.2. MAC AIRT (Org.), **The Annals of Inisfallen**, p. 370. “*Gorta & domaine mor i nErinn uili in hocc ano.*” AC 1270.14. FREEMAN (Org.), **Annála Connacht: the Annals of Connacht (A.D. 1224-1544)**, p. 156. “*dith daine co hulimda inti, gorta & galra imda examla.*” AC 1315.19. *Ibid.*, p. 240. “*Gorta romor isin bliadain-sin i nErinn uili*”. AC 1317.11. *Ibid.*, p. 250.

31 “*Gorta & domma mhór a nErinn uile in hoc anno.*” ALC 1270.6. HENNESSY (Org.), **The Annals of Loch Cé**, p. 466. “*Gorta & domaine mor i nErinn uili in hocc ano.*” AC 1270.14. FREEMAN (Org.), **Annála Connacht: the Annals of Connacht (A.D. 1224-1544)**, p. 156.

32 “*Tedmanna imda ar fod Ereenn uili.*” 1315.19. FREEMAN (Org.), **Annála Connacht: the Annals of Connacht (A.D. 1224-1544)**, p. 240.

33 “*Bódhith mhór & ár ar chethruibh uile isin mbliadain sin.*” ALC 1306.02. HENNESSY (Org.), **The Annals of Loch Cé**, p. 526. “*Bodith mor ar fut Ereenn uile co coitcheann.*” AU 1318.7. MAC CARTHY, **Annala Uladh: Annals of Ulster otherwise Annala Senait, Annals of Senat**, p. 436.

34 For an overview, see MCNAMEE, **The Wars of the Bruces: Scotland, England and Ireland, 1306-1328**; DUFFY, Séan, **Robert the Bruce’s Irish Wars: The Invasions of Ireland 1306-1329**, Charleston: Tempus, 2002.

35 “*Et ní dernad o thus domain, o dodichured Fine Fomra a hErinn, gnim bad ferr d’feraib hEreennuli ina in gnim-sin. Uair tanicc go & gorta & dith daine re lindar fodd Ereenn ed tri mbliadan co leth, & do ithdais na daine cinamuras a cheli ar fod Ereenn*” AC 1318.8. FREEMAN (Org.), **Annála Connacht: the Annals of Connacht (A.D. 1224-1544)**, p. 252.

36 NEWFIELD, Timothy P., A cattle panzootic in early fourteenth-century Europe, **The Agricultural History Review**, v. 57, n. 2, p. 155–190, 2009.

as the Great Famine of 1315-1322.³⁷ To Philip Slavin, it was “the single harshest subsistence crisis in Europe of the last two millennia”.³⁸

What exactly brought upon this calamitous state of affairs was, and remains, a topic of much debate.³⁹ The discussion ultimately dates back to a 1965 paper by Hubert H. Lamb, who argued that the European Late Middle Ages had witnessed a transition between climate regimes. The first had been a period of “notably warm climate in many parts of the world” between the years 1000 and 1200.⁴⁰ This Medieval Warm Epoch, as he christened it, was succeeded by a Little Ice Age (henceforth LIA), a term originally coined by François Matthes to describe a recent (i.e. post-Pleistocene) period of glaciation in the Sierra Nevada mountains⁴¹, but repurposed in Lamb’s paper as a regime of slight, but significantly cooling and increased wetness of all seasons, and of winters and autumns in particular.⁴² Lamb’s observations gained a lot of traction among scholars of the past, due in no small part to his own efforts in modernizing the discipline of historical climatology.⁴³ Interested on this newly-rejuvenated field was bolstered in the 1990s, when the impact of greenhouse gasses for the future of human society became a topic of major political concern.⁴⁴

Decades of new research and the advent of new techniques helped scholars perceive this transition in a different light. Analyses of paleoclimatic proxies – materials such as microorganisms, ice cores, tree rings, and pollen that can be used to reconstruct

37 KERSHAW, Ian, THE GREAT FAMINE AND AGRARIAN CRISIS IN ENGLAND 1315–1322*, *Past & Present*, v. 59, n. 1, p. 3–50, 1973.

38 SLAVIN, The 1310s Event, p. 495.

39 See, e.g. KELLY, Morgan; Ó GRÁDA, Cormac, The Waning of the Little Ice Age: Climate Change in Early Modern Europe, *The Journal of Interdisciplinary History*, v. 44, n. 3, p. 301–325, 2013; KELLY, Morgan; Ó GRÁDA, Cormac, Debating the Little Ice Age, *The Journal of Interdisciplinary History*, v. 45, n. 1, p. 57–68, 2014; KELLY, Morgan; Ó GRÁDA, Cormac, Change Points and Temporal Dependence in Reconstructions of Annual Temperature: Did Europe Experience a Little Ice Age?, *The Annals of Applied Statistics*, v. 8, n. 3, p. 1372–1394, 2014; BÜNTGEN, Ulf; HELLMANN, Lena, The Little Ice Age in Scientific Perspective: Cold Spells and Caveats, *The Journal of Interdisciplinary History*, v. 44, n. 3, p. 353–368, 2014; WHITE, Sam, The Real Little Ice Age, *The Journal of Interdisciplinary History*, v. 44, n. 3, p. 327–352, 2014.

40 LAMB, H. H., The early medieval warm epoch and its sequel, *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 1, p. 13–37, 1965, p. 13.

41 MATTHES, François, Report of Committee on Glaciers, April 1939, *Eos, Transactions American Geophysical Union*, v. 20, n. 4, p. 518–523, 1939.

42 LAMB, The early medieval warm epoch and its sequel, p. 34.

43 In 1979, Lamb organized the first congress on historical climatology, which served as a springboard for the rejuvenated discipline. For an overview of the field and its major influences, cf. BRÁZDIL *et al*, Historical Climatology In Europe – The State Of The Art.

44 *Ibid.*, p. 5.

the climatic conditions of past centuries or millennia⁴⁵ – provided a more precise estimate of the effects of the LIA and their (often substantial) regional nuances. Following a suggestion by Scott Stine, many authors replaced Lamb’s term “Medieval Warm Epoch” by “Medieval Climate Anomaly” (MCA), based on Stine’s observations that “to some regions of the world [this period represented] a far greater departure in precipitation than in temperature.”⁴⁶ Different causes have been found to explain the phenomenon, from a weakening of the North Atlantic Oscillation – a fluctuation in atmospheric pressure at sea level, with consequences to the strength of winds and incidence of storms – to a decrease in solar irradiance caused by series of volcanic eruptions between 1257 and 1341, contributing to a period of singularly low solar activity known as the Wolf Minimum (c. 1280 - c.1340).⁴⁷ While the minutiae of this discussion is too technical to have found its way into historical monographs, one fact managed to cross departmental borders. The old tenet in history that tended to prioritize the centrality of human agency and historical processes endogenous to human society had to be re-examined.⁴⁸ As Bruce Campbell wrote, it was time to emancipate nature from the role of “Malthusian positive checks” and recognize environmental phenomena as “historical prime movers” and “shapers of demographic and economic development in both the short and long terms”.⁴⁹ As entrenched as the divisions between the “natural” and the “social” sciences; “environmental” and “anthropogenic” phenomena are in the minds of authors and in the axioms of research methodologies, they should not blind us to the fact that we are all part of a same, interconnected system.

If we apply this holistic lens to the turmoil of early 14th century Ireland, it does not take long for an interesting correlation to appear. The nearly 40 years of war between the de Clares and the Uí Bhriain in Thomond (1276-1318) coincided almost perfectly with the transition period between the MCA and the LIA. Is it possible that the failure of the English to expand into southwestern Ireland and establish a lordship in this area of Gaelic influence was due not merely to political factors, but also by an adverse environmental and economic context?

45 UNITED STATES GEOLOGICAL SURVEY, **Paleoclimate: Proxies**, USGS website, Available at: <<https://www2.usgs.gov/landresources/lcs/paleoclimate/proxies.asp>>. Access date: 17 dez. 2021.

46 STINE, Scott, Extreme and persistent drought in California and Patagonia during mediaeval time, **Nature**, v. 369, n. 6481, p. 546–549, 1994, p. 549.

47 SLAVIN, The 1310s Event, p. 496; CAMPBELL, **The Great Transition**, p. 53.

48 CAMPBELL, Bruce M. S., Nature as historical protagonist: environment and society in pre-industrial England, **The Economic History Review**, v. 63, n. 2, p. 281–314, 2010, p. 282. Campbell, 2010, p. 282

49 *Ibid.*, p. 283.

The LIA and the kingdom of Thomond

The hypothesis that extreme events may have had a hand in the fortunes of the English in Ireland is not new. As I mentioned in the introduction, Mary C. Lyons invoked a possible correlation between unstable economic conditions and the troubles of the Lordship of Ireland in the early 14th century in her comprehensive study of manorial economy in the isle. As she explained it, Ireland underwent a period of “exceptionally good weather” and “sustained expansion and development of the royal manors” during the first half of the 13th century, culminating in a decade of “buoyancy and prosperity” in the 1280s.⁵⁰ This favourable circumstance came to an end in the following decades thanks to bouts of wet weather, crop failures, and cattle murrains. The net result of these extreme events were three major incidents of famine: in 1294-96, 1308-10 and the largest of them between 1315-18.⁵¹

Lyons, however, was wary of placing too much emphasis on the role of natural phenomena. While “the deterioration of weather conditions [...] thus played a critical role in inaugurating [sic] the decline of demesne cultivation in Ireland”, she wrote “[i]t would be a mistake [...] to see it as the sole or even the major factor underpinning this decline.”⁵² That fault lay instead with purveyance, a practice according to which the English Crown requested provisions from its vassals to supply royal expeditions. Reliance on Irish victuals and funds for campaigns such as the English-Welsh War of 1277-1283, the Gascon Campaign of 1294-1303 and the First War of Scottish Independence between 1296 and 1328 compromised the surplus of grain of Anglo-Irish manors and left magnates with meagre reserves with which to mitigate the environmental disaster. Lyons’ scepticism with the centrality of nature as an explanatory device finds echoes in the structure of her thesis, which dedicates little space to the pan-European manifestations of the climate crisis or their causes.

Recent scholarship seems to vindicate Lyons’ prudence. Studies of the effects of the LIA over human societies in the 14th century using paleoclimatic proxies have produced mixed results. Analyses of climate proxies from peat deposits indicate a shift

50 LYONS, *Manorial administration and the manorial economy of Ireland c. 1200-1377*, p. 331, 335.

51 *Ibid.*, p. 335.

52 *Ibid.*, p. 343.

towards wetter climate conditions around the year 1300, consistent with the picture from the annals.⁵³ In the specific case of Co. Clare – the Irish administrative division that corresponds to the ancient kingdom of Thomond – a palynological study by Jeličić and O’Connell found evidence of an “admittedly minor” “regeneration phase” in the north-west Burren region around 1350, a finding they themselves admit could have been due to a decrease in population following the Black Death rather than the devastation of the Bruce Invasion and Great Famine of 1315-1322.⁵⁴ Feeser and O’Connell concluded that climate degradation consistent with the LIA in Burren region was “plausible” due to the presence of algae *Zygnema*, the amoebae *Assulina*, and *Calluna* (a genus of heather), all of which suggest “moist conditions”.⁵⁵ Valerie Hall and Dmitri Mauquoy, however, arrived at an opposite conclusion in their analysis of plant fossil and pollen in Mongan Bog, near the monastic site of Clonmacnoise, Co. Offaly.⁵⁶ Similarly, Cole and Mitchell’s analysis of pollen from bogs in Cos. Wicklow, Offaly, and Kerry suggests that “the scale of human impact on the landscape has masked any impacts that could be directly attributed to climatic change”.⁵⁷

Thus, while the transition to the LIA meant changes in atmospheric conditions, its effects were arguably not enough by themselves to explain the economic degradation experienced in early 14th century Ireland. Moreover, as a number of authors have argued, even if the extreme events were as calamitous as the annals suggest we must keep in mind that human populations were often able to adapt to adverse circumstances. Margaret Murphy noticed that the English Crown still managed to obtain a large volume of grain via purveyance from regions such as Meath and Dublin between 1320 and

53 BLACKFORD, J. J.; CHAMBERS, Frank M., Proxy climate record for the last 1000 years from Irish blanket peat and a possible link to solar variability, **Earth and Planetary Science Letters**, v. 133, n. 1–2, p. 145–150, 1995; BLUNDELL, Antony; CHARMAN, Dan J.; BARBER, Keith, Multiproxy late Holocene peat records from Ireland: towards a regional palaeoclimate curve, **Journal of Quaternary Science**, v. 23, n. 1, p. 59–71, 2008; SWINDLES, Graeme T. *et al*, Centennial-scale climate change in Ireland during the Holocene, **Earth-Science Reviews**, v. 126, p. 300–320, 2013.

54 JELIČIĆ, Ljubica; O’CONNELL, Michael, History of vegetation and land use from 3200 B.P. to the present in the north-west Burren, a karstic region of western Ireland, **Vegetation History and Archaeobotany**, v. 1, n. 3, p. 119–140, 1992, p. 138.

55 FEESER, Ingo; O’CONNELL, Michael, Fresh insights into long-term changes in flora, vegetation, land use and soil erosion in the karstic environment of the Burren, western Ireland, **Journal of Ecology**, v. 97, n. 5, p. 1083–1100, 2009, p. 1094.

56 HALL, V. A.; MAUQUOY, Dmitri, Tephra-dated climate-and human-impact studies during the last 1500 years from a raised bog in central Ireland, **The Holocene**, v. 15, n. 7, p. 1086–1093, 2005.

57 COLE, Edwina E.; MITCHELL, Fraser J.G., Human impact on the Irish landscape during the late Holocene inferred from palynological studies at three peatland sites, **The Holocene**, v. 13, n. 4, p. 507–515, 2003, p. 513.

1340. Those numbers indicate a “considerable resilience” in face of the economic and demographic shocks caused by the Great European Famine.⁵⁸ In a paper about the Early Modern period, but whose conclusion is still applicable to the 14th century (given that the LIA not only persisted, but its changes became more pronounced with the passing of the centuries), Eugene Costello argued that the presence of agricultural activity at high altitudes suggests the LIA “was not severe enough to leave upland cereal production in a vulnerable position.”⁵⁹ This was not due to the absence of a noticeable climate degradation, but thanks to the resilience of local peasants who managed to “work with the soil, the weather and negotiate through socio-political structures on an everyday basis” in spite of the challenging conditions.⁶⁰

The complexity of medieval disasters

These objections against a maximalist interpretation of the effects of the LIA/Great Famine should not be read as a denial of the importance of the environment to human history. Rather, they are a reminder that historical processes are too complex to be waived off with grandiose monocausal explanations.

Bruce Campbell’s monumental *The Great Transition*, a holistic analysis of economic, political, and cultural processes that transformed Western Europe in the Late Medieval period, provides a measure of this complexity. The author argues that between the 13th and the 15th centuries the continent suffered “profound and irreversible changes [...] in both environmental and human conditions” that ultimately culminated, in the Early Modern Period, in the ascension of “revitalized and aggressively competitive maritime economies”, to which the technologically advanced but stagnating economies of the East” would eventually prove no match.⁶¹ This “Great Transition” would later be responsible for what Kenneth Pomeranz called the “Great Divergence”, the tipping

58 MURPHY, Margaret, *The Economy*, in: SMITH, Brendan (Org.), **The Cambridge History of Ireland: Volume 1: 600–1550**, Cambridge: Cambridge University Press, 2018, v. 1, p. 410,414.

59 COSTELLO, Eugene, *The Colonisation of Uplands in Medieval Britain and Ireland: Climate, Agriculture and Environmental Adaptation*, **Medieval Archaeology**, v. 65, n. 1, p. 151–179, 2021, p. 170.

60 *Ibid.*, p. 173.

61 CAMPBELL, **The Great Transition**, p. 3.

point when Western Europe overtook Asia as the locus of the world's mightiest economic powers.⁶²

Before this moment came to be, however, the continent lived through centuries of crisis. In addition to decades of diminished solar irradiance and changing atmospheric conditions on agriculture and food production, Europe faced a major economic recession. The fall of Acre to the Mamluks in 1291 and the subsequent papal embargoes against trade with the Muslims had serious effects on commerce in the Mediterranean.⁶³ The wars between the Mamluks and the Mongol Ilkhanate further compromised economic activity on that sector of the Silk Road, forcing commerce to be diverted to longer, costlier routes.⁶⁴ In Northern Europe, the taking over of Champagne by Philip IV of France had negative consequences for the vitality of the province's fairs – up to that point, one of the most important trade hubs of the continent. Protectionist measures taken by the French Crown against Flemish and Italian merchants reduced their volume of business by 70% in a mere two decades between the 1290s and 1310.⁶⁵ Philip's interference led to the creation of a new – and almost prohibitively costly – maritime trade route between Genoa and Bruges.⁶⁶ Increased transportation costs, on their turn, compelled the Flemish to switch from the trade of cheap cloth to luxury woollen products.⁶⁷ The sorrowful state of the commercial sector increased the reliance on the agricultural one, making hazards like harvest failures and cattle murrains all the more destructive and dangerous.⁶⁸

From the 1290s onwards, these commercial difficulties were compounded by a “multiplying number and escalating scale of feudal disputes, dynastic quarrels and territorial conflicts”.⁶⁹ The escalation of warfare led to a further increase in transportation costs, as caravans and merchant ships had to rely on escorts against brigands and pirates.⁷⁰ More importantly, more wars meant more funds spent on armies and victuals, which prompted political leaderships from across Western Europe to borrow increasingly large sums of money from Italian banks. This scenario of instability

62 POMERANZ, Kenneth, **The Great Divergence: China, Europe, and the Making of the Modern World Economy.**, Revised edition. Princeton, NJ: Princeton University Press, 2001.

63 CAMPBELL, **The Great Transition**, p. 8.

64 *Ibid.*, p. 137.

65 *Ibid.*, p. 139.

66 *Ibid.* P. 139

67 *Ibid.*, p. 140.

68 *Ibid.*, p. 9.

69 *Ibid.*, p. 141.

70 *Ibid.*

put compromised the liquidity of credit companies, making them vulnerable to credit crunches.⁷¹ Many banks were driven to bankruptcy.

Ireland's economic troubles during the late 13th – 14th century were not merely contemporary to this broader developments. At first sight, at least, they seem to be a local expression of them.⁷² According to Campbell, the decision of Flemish merchants to focus on the trade of fines wools left Ireland, which mostly exported woollen products of a coarser variety, without a market for its goods.⁷³ In 1294, the Riccardi of Lucca, an Italian corporation responsible for collecting customs at Irish ports, were driven to bankruptcy.⁷⁴ Lastly, but perhaps even more importantly, just like warfare was becoming more frequent and destructive across Western Europe, Edward Bruce's invasion and subsequent campaign between 1315-18 exposed Ireland to a conflict of an intensity rarely witnessed in the isle. According to one estimate, some dioceses – such as Dublin and Kildare, at the very heart of the English Lordship – lost as much as 50% of their estimated wealth.⁷⁵ The disaster also had a demographic impact on the isle. According to Murphy, Ireland's population declined from c.1.3 million to c. 430 thousand during the course of the 14th century.⁷⁶

It does seem, therefore, that the English Lordship of Ireland was in a precarious economic position, even if its troubles cannot be fully explained by the climate alone. But could this period of increased vulnerability also have been the trigger of *political* disasters – such as the unsuccessful English intervention in the civil wars of the Uí Bhriain between 1276-1318?

This question is harder than it seems, not the least because defining what constitutes a “disaster”, and what makes it “political”, is hardly ever straightforward. By and large, disaster experts are wary of attributing causation to the phenomena they study, especially when bold words like “catastrophe” and “calamity” are involved. As Brázdil et al. wisely remark, an “extreme event” – a “substantial deviation of a single value in a time series from an arithmetic mean or from a trend, i.e. in association with short-term events” – is not the same as a “disaster” – a measure of the impact of such

71 *Ibid.*

72 CAMPBELL, Bruce, Benchmarking medieval economic development: England, Wales, Scotland, and Ireland, c.1290, **The Economic History Review**, v. 61, n. 4, p. 896–945, 2008, p. 919.

73 *Ibid.*

74 *Ibid.*

75 CHEVALLIER, Chris, Mapping and Measuring the Impact of the Bruce Invasion, **History Ireland**, p. 16–19, 2019, p. 18.

76 MURPHY, The Economy, p. 414.

extreme events on human communities.⁷⁷ Similarly, van Bavel et al. distinguish between “hazard” – a process or event that might lead to a disaster –, “shock” – a hazard that counts with the element of surprise – and the disaster itself.⁷⁸ The authors further add that “any such distinction or threshold is an inherently anthropocentric valuation” and “any metric is open to criticisms of generalization”.⁷⁹ Even if we concede to the Annals of Connacht that the trifecta of “falsehood and famine and death of people filled the country” between 1315 and 1318, this period of hardships may not have amounted to much if the economy managed to recover in a timely fashion, if politics managed to circumvent the population loss with different economic and recruiting practices, or if this series of hazards as a whole did not result in meaningful cultural and/or political changes in the long run.

Among the authors who have written about disasters in the British Isles in the late 13th and early 14th centuries, Philip Slavin has advocated for redoubled attention to such terminological nuances. In his assessment, the region suffered a combination of “remarkably intensive warfare”, occasionally progressing into “environmental warfare” – the deliberate destruction of natural and economic resources in the manner of the latter *chevauchées* of the Hundred Years War – and “eco-biological shocks” such as the three back-to-back harvest failures of 1315-17.⁸⁰ No single factor can be blamed for the resulting disasters, and it is impossible, in his opinion, to assess the weight of each possible cause.⁸¹ To emphasize the anthropogenic dimension of such disasters, Slavin calls the changes in climate in the early 14th century “the 1310s event”, a far less sensational term than Lyons’ “Great European Disaster”.⁸² It bears mentioning, however, that even Lyons was writing from a position of caution. It is telling that she specifically wrote about a “Great northern European disaster of 1315-1318”, arguing that far worse than occasional bouts of “spectacular bad weather” were “the circumstances under which crops could fail and murrain become prevalent among livestock”.⁸³ Even these broader developments cannot be carelessly generalized, “for while the effects of the meteorological reverses were extremely serious in certain areas,

77 BRÁZDIL *et al*, *Historical Climatology In Europe – The State Of The Art*, p. 34.

78 VAN BAVEL *et al*, **Disasters and History**, p. 30.

79 *Ibid*.

80 SLAVIN, Philip, Warfare and Ecological Destruction in Early Fourteenth-Century British Isles, **Environmental History**, v. 19, n. 3, p. 528–550, 2014, p. 529,545.

81 *Ibid.*, p. 545.P. 545

82 SLAVIN, The 1310s Event.

83 LYONS, **Manorial administration and the manorial economy of Ireland c. 1200-1377**, p. 334.

this severity was by no means uniform in England”.⁸⁴ The same can be said about Ireland, where the economic foundations of the manorial economy, the nature of political bonds, and the level of pressure from neighboring Gaelic kingdoms varied from lordship to lordship. Bunratty, the center of English power in Thomond, was not Dublin or Carlow, and well-documented examples of the impact of purveyance, the Bruce Invasion or the crisis in woolen exports from the heart of the English Lordship cannot be inadvertently extrapolated to the Gaelic frontier.

To account for these nuances and avoid the siren call of a new environmental determinism, many authors have promoted conceptual frameworks based on principles of multicausality and interdependency, in which climate “does not have the statute of a primary cause”.⁸⁵ For *The Great Transition*, Campbell made use of a ‘Convergence Model’ originally designed by the U.S. National Academy of Medicine to study the transmission of infectious diseases (Fig.1).⁸⁶ Devroey drew from models of climate impact assessment by Robert Kates and Matthew Hannaford (Fig. 2).⁸⁷ Daniel Krämer and Christian Pfister proposed a four-fold impact model that classifies biophysical, economic, demographic, and cultural consequences of extreme events as stages in a progression (Fig.3).⁸⁸ Martin Bauch and Gerrit Jasper Schenk adopted Adger et al.’s concept of “social teleconnections”, defined as “mechanisms that produce interdependence in the vulnerabilities of ecosystems, people, and places”.⁸⁹

84 *Ibid.*, p. 343.

85 DEVROEY, *La Nature et le roi*, p. 58.,

86 RELMAN, David A. *et al*, **Global Climate Change and Extreme Weather Events: Understanding the Contributions to Infectious Disease Emergence**, Washington D.C.: The National Academies Press, 2008, p. 14; CAMPBELL, *The Great Transition*, p. 22.

87 DEVROEY, *La Nature et le roi*, p. 58.

88 LUTERBACHER, J.; PFISTER, C., The year without a summer, **Nature Geoscience**, v. 8, n. 4, p. 246–248, 2015, p. 248.

89 BAUCH, Martin; SCHENK, Gerrit Jasper, Teleconnections, Correlations, Causalities between Nature and Society? An Introductory Comment on the “Crisis of the Fourteenth Century”, *in*: **Teleconnections, Correlations, Causalities between Nature and Society? An Introductory Comment on the “Crisis of the Fourteenth Century”**, Berlin/Boston: De Gruyter, 2019, p. 17; ADGER, W. Neil; EAKIN, Hallie; WINKELS, Alexandra, Nested and teleconnected vulnerabilities to environmental change, **Frontiers in Ecology and the Environment**, v. 7, n. 3, p. 150–157, 2009, para 8.

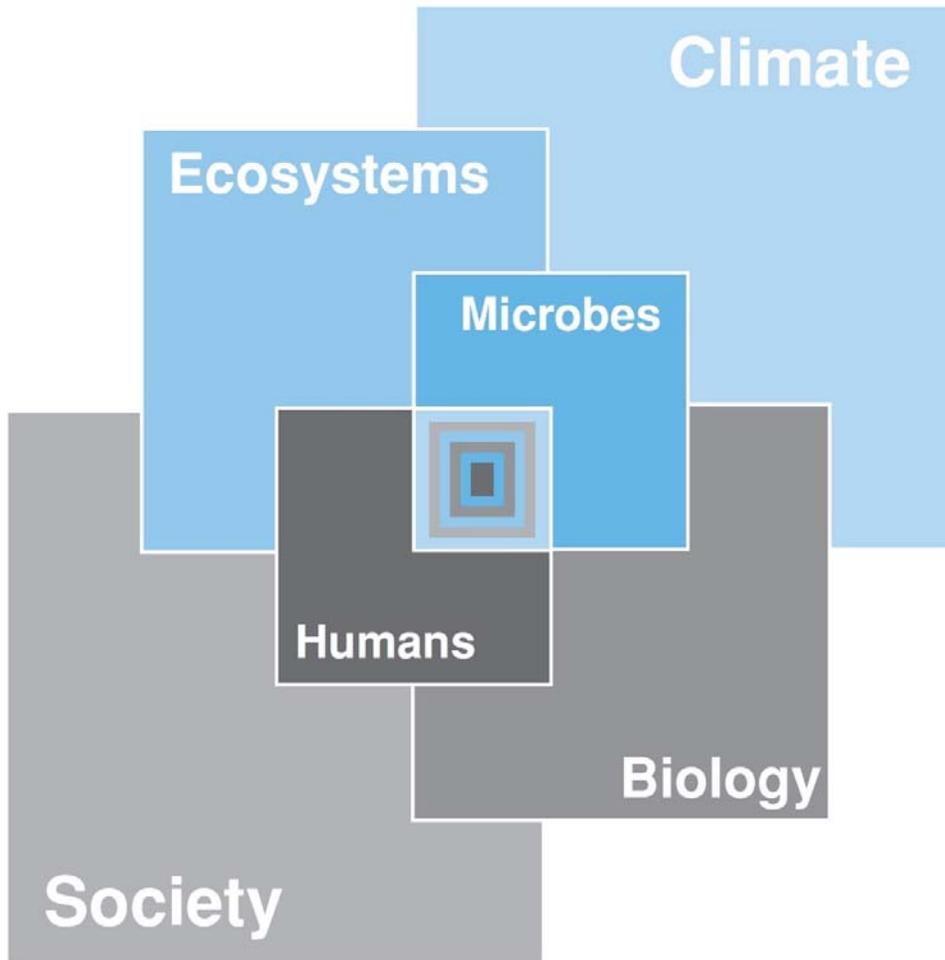


Figure 1: Campbell's dynamic socio-ecological system, based on National Academy of Medicine's Convergence Model.

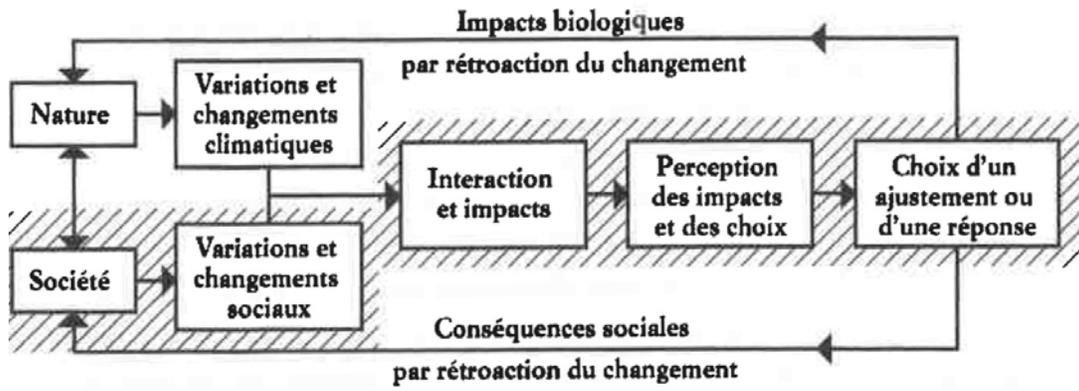


Figure 2: Devroey's model of interrelation between climate and society, based on Hannaford.

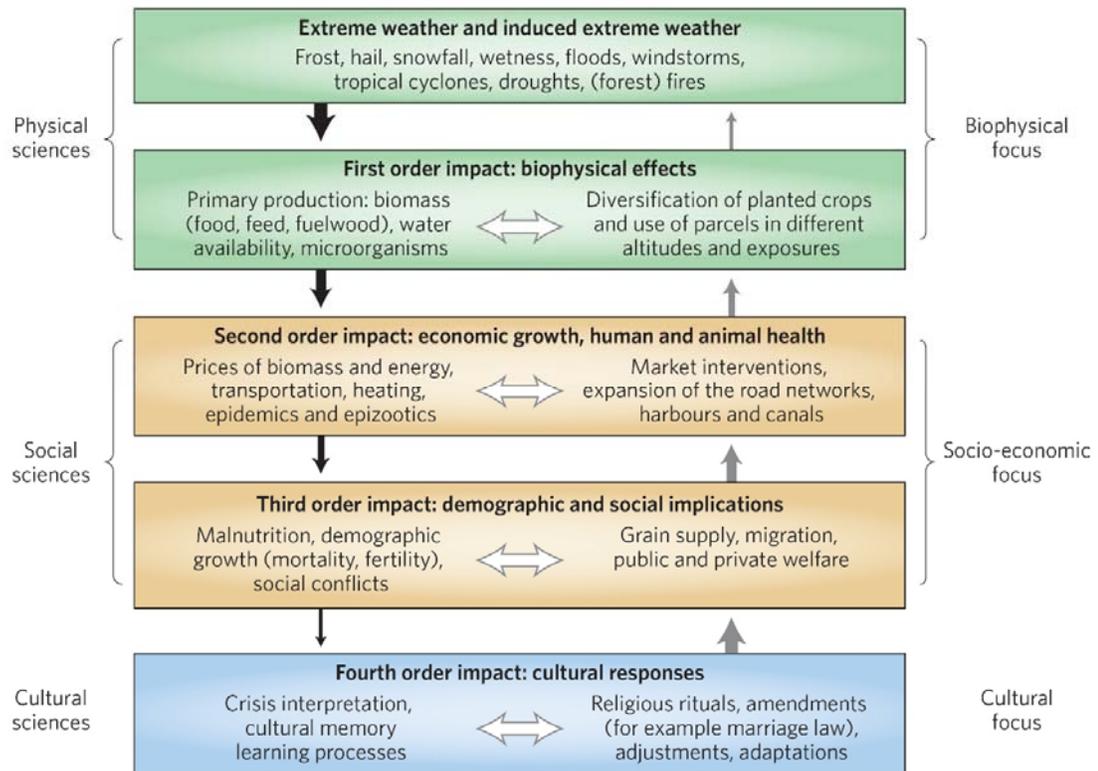


Figure 3: Krämer and Pfister’s model of climate and social interactions.

None of these models are perfect, and ultimately all of them reflect the priorities of whoever is using them. Even at their most useful, however, such frameworks offer little practical guidance on how to navigate the many technical, theoretical (and even departmental) differences inherent to the study of so disparate phenomena. It may not be enough to pursue “new methodological approaches that allow us to think about the Earth in terms of interactions between the climatic system and the social ecosystems”, as Devroey rightly argues.⁹⁰ We will also need a method.

⁹⁰ DEVROEY, *La Nature et le roi*, p. 57.

1.2. Agent-based modelling ⁹¹

Devroey was not the only (or the first) author to advocate for a different conception of knowledge to deal with the complicated tangle of human-nature relationships. Over 25 years ago, in the aptly titled *The Web of Life*, Fritjof Capra argued that problems as varied as climate change, widespread poverty and ethnic warfare “must be seen as just different facets of one single crisis”: the result of an “outdated worldview” incapable of grappling with “our overpopulated, globally interconnected world”.⁹² To escape from this conundrum, he continued, it would be necessary to adopt a new network-based research paradigm, focused on relationships rather than objects and without a single discipline to serve as an obvious center.⁹³ This trend, hailed as a methodological turn by some of its advocates,⁹⁴ came to be known as complex systems analysis.

A complex system, in Melanie Mitchell’s definition, is

A system in which large networks of components with no central control and simple rules of operation give rise to complex collective behavior, sophisticated information processing, and adaptation via learning or evolution.⁹⁵

The description of a system as networks stresses the fact that, in complex environments, most of the components are connected to one another. This is true not only of people, subjected to (and exerting) pressures within a web of personal ties, face-to-face interactions and institutional obligations, but of nature itself, in which ecological, environmental, human and even microbiological factors impact one another and generate specific outcomes. Because these weaves of interaction have no central control and follow no obvious rules, these systems are hard to explain with simplistic causal models. Its developments are often emergent, large-scale, complex and often

91 An adapted and expanded version of this section has been published as MARINO CARVALHO, V. Modeling crises in agent-based environments: the case of the Lordship of Ireland (1189-1318) In: CÂNDIDO DA SILVA, M.; WILKIN, A.; JAUMAIN, S.; ALMEIDA, N. de B.; LOUALT, F. (Eds.) Crises: Uma Perspectiva Multidisciplinar. São Paulo: Intermeios, 2021, pp. 127-154

92 CAPRA, Fritjof, *The Web of Life: A New Scientific Understanding of Living Systems*, New York: Anchor Books, 1997, p. 4.

93 *Ibid.*, p. xviii, 37, 39.

94 URRY, J. The Complexity Turn. *Theory, Culture & Society*, v. 22 n. 5, 2005, pp. 1-14

95 MITCHELL, M. *Complexity: A Guided Tour*. Oxford: Oxford University Press, 2009, p. 13

unpredictable effects brought about by locally interacting agents with limited information and agency.⁹⁶ Emergency can explain human dynamics in social systems in which there is no central authority, or where influential authorities or institutions operate alongside (and/or compete) with bottom-up rules created by independent actors. Emergency is key to understand what Beni and Wang have labeled swarm intelligence: the capacity of agents “to produce unpredictably specific [...] ordered patterns of matter in the external environment”⁹⁷. Collective behavior of this nature can be seen in many of the phenomena studied by social scientists, ranging from the destructive (drivers causing a traffic jam, stockbrokers triggering a recession, insurgents toppling a regime) to the constructive (habits becoming codified laws, languages changing with usage, consumers dictating market trends).

The fact that historical processes too can be understood as complex and emergent systems has been made by social scientists for generations. As far back as the mid-20th century, authors like Warren Weaver and Friedrich Hayek called attention to the problems posed by the multiplicity of variables, causal equifinality, the spontaneous emergence of social structures and the shortcoming of top-down hypotheses for the explanation of human phenomena.⁹⁸ Still, the suggestion that the intricacies of historical processes were comparable to the complexity of natural phenomena was first made in earnest in Ilya Prigogine and Isabelle Stengers’ 1979 landmark essay *La Nouvelle Alliance: Métamorphose de la Science*.⁹⁹ The authors argued that mainstream scientific practice adhered to an atemporal culture of science that posited the existence of its objects as static and reversible. That culture had been challenged by the realization that randomness and irreversibility played a far more crucial role in natural phenomena than scientists previously imagined.¹⁰⁰ This discovery called for the dialogue with a different culture, one that had always been the norm in history: a conception of science as

96 AXELROD, R. **The Complexity of Cooperation: Agent-Based Models of Competition and Collaboration**. Princeton: Princeton University Press, 1997, p. 4

97 BENI, G.; WANG, J. Swarm Intelligence in Cellular Robotic Systems. *In*: DARIO, P.; SANDINI, G.; AEBISCHER, P. (Eds.) **Robots and Biological Systems: Towards a New Bionics?** Berlin/Heidelberg: Springer, 1993, p. 706

98 WEAVER, W. Science and Complexity. **American Scientist**, v. 36, 1948, pp. 536-544; HAYEK, F. The Theory of Complex Phenomena. *In*: **Studies in Philosophy, Politics and Economics**. Chicago: University of Chicago Press, 1967, pp. 22-42

99 PRIGOGINE, I.; STENGERS, I. **La Nouvelle Alliance : Métamorphose de la Science**. Paris : Gallimard, 1979.

100 PRIGOGINE, I.; STENGERS, I. **Order Out of Chaos: Man’s New Dialogue with Nature**. New York/Toronto: Bantam Books, 1984, p. xxviii

temporally contingent, in which time itself was an object of analysis. Prigogine and Stengers' essay paralleled a larger shift in the understanding of knowledge in which science was no longer seen as a hierarchy of disciplines with physics at the top, but "as a network of concepts and models, in which no part is any more fundamental than the others".¹⁰¹ This call was echoed by a number of historians and social scientists, who contended that "historical processes and events are ultimately underpinned by, or supervene on, causal physical mechanisms"¹⁰², and that "the very division between the 'physical' and the 'social' is a social-historical product and one that is dissolving".¹⁰³ More importantly, it resulted in the introduction of new methods and epistemologies to social sciences, which proved as useful for studying human phenomena as they were to understanding nature. One of the innovations that resulted from this exchange is called agent-based modeling.

Agent-based modeling (henceforth ABM) is a genre of computer simulation focused on the relationships between agents and their environment. Also known as generative social science (a name that has since fallen out of use), its purpose is to recreate a social environment within a software and run virtual experiments to study that society by proxy.

ABM research consists in three main steps. First, the researcher must conceive a conceptual model synthesizing the relationships of historical agents between themselves and their environment. An "agent", from a computational standpoint, is any kind of entity that has an impact on the system. They includes individuals, collectives (such as institutions, classes or ethnicities), living creatures (like animals, disease vectors or pathogens) or even environmental effects (like air masses, water or terrain). Likewise, an environment need not be a physical stage, but also a social habitat (e.g. a social network) or an abstract representation (a grid or lattice). The basic historical model summarizing these interactions does not need to be formal (like game theoretic or other equation-based models). Informal models like ethnographies and historical narratives are equally compatible. Lastly, the model does not need to be original. Rather, ABM

101 CAPRA, F. **The Web of Life: A New Scientific Understanding of Living Systems**. New York: Doubleday, 1996, p. 39

102 REISCH, G.A. Chaos, History and Narrative. **History and Theory**, v. 20, n.1, 1991, p.6 See also MCCLOSKEY, D. History, Differential Equations and the Problem of Narration. **History and Theory**, v. 20, n.1, 1991, pp. 21-36; SHERMER, M. Exorcising Laplace's Demon: Chaos and Antichaos, History and Metahistory. **History and Theory**, v. 34, n. 1, 1995, pp. 59-83

103 URRY, J. The Complexity Turn. **Theory, Culture & Society**, v. 22 n. 5, 2005, p. 7

can be used – as it indeed has – to test, scrutinize or teach historical models that have already become canonical in the historiography.¹⁰⁴

Second, this model is translated into an implemented model written in code. Any programming language can be used for the task, although dedicated ABM environments – like MASON, JADE, Repast and NetLogo – have already been developed and are preferred by many researchers.¹⁰⁵ The implemented model becomes the basis of an interactive virtual world that is used to analyze the historical environment by proxy. The researcher runs simulations tracing the evolution of these systems within a time frame, applying virtual “controls” that enable or disable the historical variables that are interesting to the study. Third, the results are quantitatively analyzed to account for stochasticity – the propensity to deliver random, unpredictable outcomes. If the simulations produce scenarios that do not conform to the predictions of the original historical model, it means that either the model has been wrongly implemented as a simulation (which means the code has to be rewritten) or the model itself is contradictory in ways that were not obvious even to the researchers. Checking the correspondence of the code to the written model is a process called verification. Checking the consistence of the model to historical reality, on the other hand, is called validation. Neither of these steps need to end with the publication of the work. ABMs can be uploaded to online depositories like ComSES Network and Modeling Commons, where other scholars may examine, correct or add to the code.

Today, ABM has gained an important foothold in the field of archaeology. With the benefit of hindsight, it is easy to see the appeal. Archaeologists have traditionally dealt with research questions to which the relationship of people to their physical environment and the dynamics of large, heterogeneous populations are of primary importance. The discipline has also experimented with some genres of computer simulation as early as the 1970s.¹⁰⁶ Historians by and large have yet to follow the same course. Even though complexity theory was already discussed by historians as early as

104 Jeremy Throne undertook an ABM examination of Robert Darnton’s communication circuit model. See THRONE, J. Modeling the Communication Circuit: An Agent-Based Approach to Reading in “N-Dimensions”. In: YOUNGMAN, P.A.; HADZIKADIC, M. (Eds). **Complexity and the Human Experience: Modeling Complexity in the Humanities**. Boca Raton: Taylor & Francis, 2014, pp. 105-120

105 Romanowska et al.’s manual of ABM in archaeology is built entirely on NetLogo. Cf. ROMANOWSKA, Iza; WREN, Colin D.; CRABTREE, Stefani A., **Agent-Based Modeling for Archaeology: Simulating the Complexity of Societies**, Santa Fe: Santa Fe Institute Press, 2021.

106 *Ibid.*, p. 11.

the 1990s¹⁰⁷ -- incidentally, the same decade in which ABM works in archaeology started to gain visibility¹⁰⁸ -- going “beyond the textual”¹⁰⁹ in history remains a taboo. In 2008, for example, arguably echoing the feelings of many practicing historians, Didier Méhu quibbled that “the virtual world is at the antipode of the historian’s profession”, that the very notion of an “authentic medieval virtual world” was absurd and that virtual reconstructions cannot even be used as pedagogic tools, being as historically valid as renaissance fairs.¹¹⁰ While Kevin Kee is right to point out that such acts of resistance are usually motivated by the “anxiety that the use of computing technology requires skill sets that [historians] do not possess”¹¹¹ and which is bound to make laggards obsolete, it is also a result of the perception that previous attempts to make history with computers have amounted to little more than gimmicks.¹¹² As champion of narrative Lawrence Stone wrote in the 1980s,

“It is just those projects that have been the most lavishly funded, the most ambitious in the assembly of vast quantities of data by armies of paid researchers, the most scientifically processed by the very latest in computer technology, the most mathematically sophisticated in presentation, which have so far turned out to be the most disappointing.”¹¹³

To many in the profession, the disappointment persists to this day.

It does not help that ABM, like the computational research methods that preceded it, usually present their findings in ways that are unintelligible to most mainstream historians. ABM is fundamentally a quantitative analytical method. While

107 MCCLOSKEY, Donald N., History, Differential Equations, and the Problem of Narration, **History and Theory**, v. 30, n. 1, p. 21–36, 1991; REISCH, George A., Chaos, History, and Narrative, **History and Theory**, v. 30, n. 1, p. 1–20, 1991; SHERMER, Michael, Exorcising Laplace’s Demon: Chaos and Antichaos, History and Metahistory, **History and Theory**, v. 34, n. 1, p. 59–83, 1995.

108 For a history of ABM in archaeology, cf. LAKE, M. W., Trends in Archaeological Simulation, **Journal of Archaeological Method and Theory**, v. 21, n. 2, p. 258–287, 2014.

109 The expression is Jeremy Antley’s. Cf. ANTLEY, Jeremy, Going Beyond the Textual in History, **Journal of Digital Humanities**, v. 1, n. 2, 2012.

110 MÉHU, Didier, L’historien médiéviste face à la “demande sociale”, in: MÉHU, Didier; ALMEIDA, Néri de Barros; CÂNDIDO DA SILVA, Marcelo (Orgs.), **Pourquoi Étudier le Moyen Âge? Les Médiévistes face aux usages sociaux du passé**, Paris: Publications de la Sorbonne, 2012, p. 119–20.

111 KEE, Kevin, Introduction, in: KEE, Kevin (Org.), **Pastplay: Teaching and Learning History with Technology**, [s.l.]: The University of Michigan Press, Ann Arbor, p. 2.

112 THOMAS III, William G., Computing and the Historical Imagination, in: SCHREIBMAN, Susan; SIEMENS, Ray; UNSWORTH, John (Orgs.), **Companion to Digital Humanities (Blackwell Companions to Literature and Culture)**, Hardcover. Oxford: Blackwell Publishing Professional, 2004, p. 56–68.

113 STONE, Lawrence, **The Past and the Present Revisited**, New York: Routledge, 1987, p. 84.

these models usually have a visual interface and displays that track changes and outcomes, the technique almost always require experimentation and statistical analysis to produce meaningful results. Unfortunately, outside of a few niches like Cliometrics – the application of econometrics to research about the past – most historians are not versed in quantitative methods, and data analysis techniques are not usually part of the syllabus of undergraduate or master’s level history programs. To say that there is a Pearson correlation coefficient of + 0.85 between Irish townlands in which English castles were built and Irish townlands which suffered substantial ecological destruction between the 17th and 19th century, to use a hypothetical example, is arguably a trivial statement to a social scientist or archaeologist versed in statistics. However, most historians would find the statement meaningless without clarification. If those same historians are already inclined to disagree with the study’s conclusion, they may even accuse the quantitative author of deliberately using numbers and jargon to mask an otherwise weak or problematic argument.

As a consequence, even if historians were able and willing to learn the basics of programming in order to understand an ABM’s code, they would still be hard-pressed to use it for experimentation. Without this crucial analytical step, ABM is reduced to a form of data visualization: useful for classroom use and scientific outreach, but otherwise as opaque and unwieldy as a non-interactive videogame.

Yet, while videogames are hardly the first image that comes to mind when one thinks about historiography, their conspicuous similarities to ABM need not be read as an indictment against the latter. As Shawn Graham argues, if this genre of scientific modeling is essentially a “species of video game that plays itself”, it follows that conventional games can also be used as an “experimental petri dish” for archaeological and historical research.¹¹⁴ And games, their association with tired medievalist tropes and World War II shooters notwithstanding, do have one advantage traditional scholarly modeling lacks: they are extremely accessible, even to a lay audience.

114 GRAHAM, Shawn, On Games that Play Themselves: Agent based models, archaeogaming, and the useful deaths of digital Romans, *in*: MOL, Angus A. a *et al* (Orgs.), **The Interactive Past: Archaeology, Heritage, and Video Games**, 1ª edição. Leiden: Sidestone Press, 2017, p. 125.

1.3. Games of scientific discovery

The body of literature on the use of videogames for history education is large and consistently expanding.¹¹⁵ Whether such ludic artifacts can also be used in historical research is a more contentious question. Yet, in recent years a number of scholars have answered it in the affirmative.¹¹⁶ Games can be defined as a rule-based medium in which arguments are made through the execution of processes.¹¹⁷ By carefully designing reward mechanisms, behavioral strategies of non-player characters, and spatial boundaries, game designers can not only design virtual environments that mimic the logic of real-world systems, but can also add their own judgments to it— e.g. setting a higher payoff to cereal production than hunting-gathering in a grand strategy game, thus encouraging players to choose a sedentary lifestyle over a nomadic one. Because programming languages operate on a strict syntax, videogames can technically be regarded as a genre of formal models.¹¹⁸ Or, to be more specific, as a kind of modeling in which a conceptual model written in formal language (the code) generates a

115 See, for example, MCCALL, Jeremiah, **Gaming the Past: Using Video Games to Teach Secondary History**, Illustrated edição. New York: Routledge, 2011; MCCALL, Jeremiah, Teaching History With Digital Historical Games: An Introduction to the Field and Best Practices, **Simulation & Gaming**, v. 47, n. 4, p. 517–542, 2016; MCCALL, Jeremiah *et al*, Using Games in the Classroom, *in*: SCHRIER, Karen (Org.), **Learning, Education and Games. Volume Two: Briinging Games into Educational Contexts**, Pittsburgh: ETC Press, 2016, p. 19–42; HOUGHTON, Robert, Scholarly History through Digital Games: Pedagogical Practice as Research Method, *in*: ARIESE-VANDEMEULEBROUCKE, Csilla E. *et al* (Orgs.), **Return to the Interactive Past. The Interplay of Video Games and Histories**, Leiden: Sidestone Press, 2021, p. 137–56; SQUIRE, Kurt D., **Replaying history: Learning world history through playing “Civilization III”**, Indiana University, 2004; TELLES, Helyom; ALVES, Lynn, Ensino de História e Videogame: Problematizando a Avaliação de Jogos Baseados em Representações do Passado, **Anais do Seminário de Jogos Eletrônicos, Educação e Comunicação**, 2015; GRAHAM, Shawn; KEE, Kevin, Teaching History in an Age of Pervasive Computing: The Case for Games in the High School and Undergraduate Classroom, *in*: **Pastplay: Teaching and Learning History with Technology**, Ann Arbor: The University of Michigan Press, 2014, p. 270–91.

116 CLYDE, Jerremie; HOPKINS, Howard; WILKINSON, Glenn, Beyond the “Historical” Simulation: Using Theories of History to Inform Scholarly Game Design., **Loading...**, v. 6, n. 9, 2012; SPRING, Dawn, Gaming history: computer and video games as historical scholarship, **Rethinking History**, v. 19, n. 2, p. 207–221, 2015; CARVALHO, Vinicius Marino, Videogames as Tools for Social Science History, **Historian**, v. 79, n. 4, p. 794–819, 2017; HOUGHTON, Robert, Beyond Education and Impact: Games as Research Tools and Outputs, *in*: HOUGHTON, Robert (Org.), **Teaching the Middle Ages through Modern Games: Using, Modding and Creating Games for Education and Impact**, Oldenbourg: De Gruyter, 2022.

117 A feature Ian Bogost calls ‘procedural rhetoric’. BOGOST, Ian, **Persuasive Games: The Expressive Power of Videogames**, Cambridge, Mass.: Mit Press, 2010.

118 CARVALHO, Videogames as Tools for Social Science History, p. 807; MCCALL, Jeremiah, The Historical Problem Space Framework: Games as a Historical Medium, **Game Studies**, v. 20, n. 3, 2020, Para 6. Available at: <<http://gamestudies.org/2003/articles/mccall>> (Access Date 16/12/2021)

simulation users interact with.¹¹⁹ Not surprisingly, the vocabulary and even philosophy of model-based social sciences sometimes make an appearance in game design books. Wendy Despain's *100 Principles of Game Design* includes among its entries key social-scientific concepts like Nash equilibrium and Pareto optimality.¹²⁰ Katie Salen and Eric Zimmerman's game design textbook *Rules of Play* dedicates a whole chapter to game theoretic models, arguing that this branch of applied mathematics is invaluable to understand "how players plan their course of action within a game and how they formulate strategies and make decisions."¹²¹

But games have at least two distinctive advantages over traditional formal models. First, they can be understood and experimented with by anyone who learn their rules, regardless of their mastery of formal languages or the theoretical and empirical context that informs their rules. Second, they are often flexible enough to not merely be *executable* by users – as would an equation, in which one merely fills in the values of the parameters – but also *modifiable* by players, who are sometimes inclined to produce and act on their own truths.¹²² As such, they are not substitutes for more traditional kinds of modeling – in most situations, an equation or decision tree would do just fine – but can be an excellent *complement* to test the robustness of conceptual models, collect additional data and/or put the assumptions of researchers under a magnifying glass. Within the natural sciences, researchers have already started to exploit the potential of these "scientific discovery" games, with applications as varied as predicting protein folding¹²³, measuring public awareness about anthropogenic climate change ¹²⁴, validating bioacoustics data ¹²⁵, designing synthesizable RNA molecules¹²⁶, and

119 On the differences between "model" and "simulation", Cf. MCCARTY, Willard, Modeling: A Study in Words and Meanings, in: SCHREIBMAN, Susan; SIEMENS, Ray; UNSWORTH, John (Orgs.), **A Companion to Digital Humanities**, Oxford: Blackwell, 2007, p. 263–64.

120 DESPAIN, Wendy (Org.), **100 Principles of Game Design**, 1st edition. Berkeley, Calif.: New Riders Pub, 2012, p. 35–39. Pp. 35-39

121 SALEN, Katie; ZIMMERMAN, Eric; TEKINBA, Katie Salen, **Rules of Play: Game Design Fundamentals**, Cambridge/ London: MIT Press, 2003, Chapter 19, "Introducing Game Theory", para 3.

122 ANTLEY, Going Beyond the Textual in History, Para 7. Available at: <<http://journalofdigitalhumanities.org/1-2/going-beyond-the-textual-in-history-by-jeremy-antley/>> (Access Date 16/12/2021).

123 COOPER, Seth *et al*, Predicting protein structures with a multiplayer online game, **Nature**, v. 466, n. 7307, p. 756–760, 2010.

124 SEEBAUER, Sebastian, Measuring Climate Change Knowledge in a Social Media Game with a Purpose, in: **2013 5th International Conference on Games and Virtual Worlds for Serious Applications (VS-GAMES)**, Poole, 2013, p. 1–8.

125 LOUREIRO, Pedro *et al*, Citizen Science and Game with a Purpose to Foster Biodiversity Awareness and Bioacoustic Data Validation, in: BROOKS, Anthony L.; BROOKS, Eva; SYLLA, 47

identifying genes that could predict breast cancer.¹²⁷ In game studies literature, games of this sort, which are specifically designed to fulfill a second purpose beyond mere fun, are commonly known as serious games¹²⁸; or, more infrequently, “games with a purpose” (GWAPs).¹²⁹

The eclectic and accessible nature of serious games and their notable crowdsourcing potential has earned them a following among scholars who would not normally be interested in the neo-positivistic, quantitative-leaning history usually associated with modeling. William Urrichio regarded historical videogames as examples of the “postmodern *zeitgeist*”¹³⁰, a point expanded upon by Claudio Fogu—who argued that virtual histories are “interested only in what may happen and are no longer concerned with what has happened”¹³¹—and Adam Chapman—who claims historical videogames “tak[e] the fictive nature of history to its most extreme conclusion”.¹³² Authors like Robert Houghton and Thomas Apperley, for example, have called attention to the practice of “modding”—tinkering with the game itself to add in new assets, change parameters or modify its rules—as a critical activity that allows players to question the choices made in designing its mechanics and to account for their shortcomings.¹³³ Kevin Kee and Shawn Graham argue that games are at their most useful when they are used for meta-gaming—i.e. when they are handled in ways that

Cristina (Orgs.), **Interactivity, Game Creation, Design, Learning, and Innovation**, Cham: Springer International Publishing, 2019, p. 245–255.

126 WELLINGTON-OGURI, Roger *et al*, Evidence of an Unusual Poly(A) RNA Signature Detected by High-Throughput Chemical Mapping, **Biochemistry**, v. 59, n. 22, p. 2041–2046, 2020.

127 GOOD, Benjamin M *et al*, The Cure: Design and Evaluation of a Crowdsourcing Game for Gene Selection for Breast Cancer Survival Prediction, **JMIR Serious Games**, v. 2, n. 2, p. e7, 2014.

128 See LAAMARTI, Fedwa; EID, Mohamad; EL SADDIK, Abdulmotaleb, An Overview of Serious Games, **International Journal of Computer Games Technology**, v. 2014, 2014.

129 AHN, Luis, Games with a Purpose, **Computer**, v. 39, p. 92–94, 2006. Some authors define GWAPs as neither “ludic” or “serious”, but rather a third category of games. See LAFOURCADE, Mathieu; JOUBERT, Alain; BRUN, Nathalie Le, **Games with a Purpose**, 1ª edição. Hoboken, NJ: London: Wiley-Iste, 2015, p. xiv.

130 URICCHIO, William, Simulation, History, and Computer Games, *in*: RAESSENS, Joost; GOLDSTEIN, Jeffrey (Orgs.), **Handbook of Computer Game Studies**, Cambridge: MIT Press, 2005, p. 328.

131 FOGU, Claudio, Digitalizing Historical Consciousness, **History and Theory**, v. 48, n. 2, p. 103–121, 2009, p. 121.

132 CHAPMAN, Adam, Post-Modernism and Games of Historical Truth. **Historical Games Network Blog**, 21/04/2021. Available at: <<https://www.historicalgames.net/post-modernism-and-games-of-historical-truth/>> (Access Date: 16/12/2021)

133 HOUGHTON, Scholarly History through Digital Games: Pedagogical Practice as Research Method; APPERLEY, Thomas, Modding the Historians’ Code: Historical Verisimilitude and the Counterfactual Imagination, *in*: KAPPELL, Wilhem; ELLIOT, Andrew B.R. (Orgs.), **Playing with the Past: Digital games and the simulation of history**, London: Bloomsbury Academic, 2013, p. 185–198.

were not anticipated by the game designers so that game mechanics can be analyzed with “an outside-looking-in awareness”.¹³⁴ Meta-gaming include modding, but also actions like exploiting glitches¹³⁵, adopting unconventional tactics to trigger outcomes not predicted by the developers or exploring in-game editors or console commands to tweak game parameters. If done purposefully, the authors argue, subjecting a game to such “stress tests” may be used to critically comment on its strengths and weaknesses, not unlike how historians actually do in historiographical papers and literature reviews.¹³⁶

But the scholarly potential of metagaming goes even further than that. Graham reminds us that gamers who play in order to “break” a game – e.g., devising a strategy to defeat a faction that is supposed to be invincible, or avoid a seemingly unavoidable outcome – are essentially “acting like a researcher in this simulation.”¹³⁷ Andrew Reinhart pushes the parallel even further, suggesting that archaeologists can treat games like a *de facto* ABM, “tweak[ing] a variable or condition in order to experiment, and to rerun those experiments to test a hypothesis”.¹³⁸ While authors like Kevin Schut and Jeremiah McCall have advised caution in using games this way – citing biases like its tendency to downplay non-systematic events and to overindulge in quantification¹³⁹ –, such problems are hardly unsurmountable. Commenting specifically on wargaming – games played by armed forces and defense analysts to study conflict scenarii without involving actual military forces¹⁴⁰ – Peter Perla argues that it “does not pretend to – indeed, is simply not able to – address all problems associated with defense”.¹⁴¹ Rather,

134 GRAHAM; KEE, *Teaching History in an Age of Pervasive Computing: The Case for Games in the High School and Undergraduate Classroom*, p. 278.

135 Erratic behavior by some element of the game due to a coding error.

136 GRAHAM; KEE, *Teaching History in an Age of Pervasive Computing: The Case for Games in the High School and Undergraduate Classroom*, p. 290.

137 GRAHAM, *On Games that Play Themselves: Agent based models, archaeogaming, and the useful deaths of digital Romans*, p. 128.

138 REINHARD, Andrew, **Archaeogaming: An Introduction to Archaeology in and of Video Games**, Illustrated edição. New York: Berghahn Books, 2018, p. 124.

139 SCHUT, Kevin, *Strategic Simulations and Our Past: The Bias of Computer Games in the Presentation of History*, **Games and Culture**, v. 2, n. 3, p. 213–235, 2007; MCCALL, Jeremiah, *Navigating the Problem Space: The Medium of Simulation Games in the Teaching of History*, **The History Teacher**, v. 46, n. 1, p. 9–28, 2012, p. 17–18.

140 PERLA, Peter P., **The Art of Wargaming: A Guide for Professionals and Hobbyists**, Annapolis, Md: Naval Inst Pr, 1990, Chapter 9, “Definitions”, Para 1.

141 PERLA, Peter, *Operations Research, Systems Analysis, and Wargaming: Riding the Cycle of Research*, in: HARRIGAN, Pat; KIRSCHENBAUM, Matthew G. (Orgs.), **Zones of Control: Perspectives on Wargaming**, Cambridge: MIT Press, 2016, p. 159–82, “Living Stories to Create Experience”, para 7.

they are all about providing a “shared experience” of “people making decisions and communicating them [...] – all the while plagued by uncertainty and complexity”.¹⁴² These models need not account for every historical nuance to produce useful knowledge, because human minds engaged in critical play will “generate a wealth of ideas that go beyond those created by modelers working in more static environments.”¹⁴³ In a paper about historical ABMs that also mentions serious games, Michael Gavin adopts a similar position, claiming that the goal of this genres of computation history is not to “match the historical data exactly”, but “subject our general ideas about historical causation to scrutiny and experimentation.”¹⁴⁴

Up until very recently, many authors who had worked with scientific discovery games were primarily concerned with electronic games. Dörner et al. explicitly define serious games as digital games – i.e., “[g]ames that use some kind of computer machinery”¹⁴⁵ – “created with the intention to entertain and to achieve at least one additional goal”.¹⁴⁶ Similarly, von Ahn talks about GWAPs as multiplayer online games in the lines of the Google image labeller.¹⁴⁷ Lafourcade et al.’s compendium of existing GWAPs typifies this genre of games as tools for “harnessing human skills” to either “support programs to process their understanding of the world” or “to increase the computing power [of home computers] at the service of a research project.”¹⁴⁸ Many authors, however, have voiced the counterargument that analog games, like board or card games, can perform similar functions while not requiring a “need for complex and technical computing skills or the devotion of substantial resources.”¹⁴⁹ Videogames demand capable machines both to be developed and played, not to mention access to game engines¹⁵⁰ and/or specialized software. These tools might be commonplace among modding enthusiasts but are not part of the toolkit of academic historians, nor are they likely to be in the foreseeable future. Analog games, on the other hand, can be

142 *Ibid.*

143 *Ibid.*, "Riding the Cycle of Research to Interactive Planning ", para 6.

144 GAVIN, Michael, Agent-Based Modeling and Historical Simulation, **Digital Humanities Quarterly**, v. 008, n. 4, 2014, Para 34.

145 DÖRNER, Ralf *et al.*, Introduction, *in*: DÖRNER, Ralf *et al.* (Orgs.), **Serious Games: Foundations, Concepts and Practice**, Cham: Springer International Publishing, 2016, p. 2.

146 *Ibid.*, p. 3.

147 Also known as the ESP game, the image labeller is a GWAP that encourages people to add labels to images. AHN, Games with a Purpose, p. 92.

148 LAFOURCADE; JOUBERT; BRUN, **Games with a Purpose**, p. xiv.

149 HOUGHTON, Robert, World, Structure and Play: A Framework for Games as Historical Research Outputs, Tools, and Processes, **Práticas da História**, v. 7, p. 11–43, , p. 40.

150 Game engines are frameworks containing packages of assets and software for videogame developing.

developed, prototyped and shared by relying on as little a word processor, paper, dice, and imagination. Furthermore, unlike videogames, ABMs and other genres of computerized history, a scholarly board game will never obsolesce, and can still be played, modified, and built upon decades after being released.¹⁵¹

While making science with pawns and cardboard might seem rudimentary in the age of big data and sophisticated data analysis, board games have long been used for research and otherwise “serious” purposes. Modern wargaming may count with complex computational aids, but it ultimately derives from the Prussian tradition of *kriegsspiel*, a type of realistic military simulation first experimented by Johann C.L. Hellwig in 1780 and eventually adopted by the Prussian army as a tool to train officers.¹⁵² Likewise, the concept of “serious games” did not originally discriminate between digital and non-digital games. The term was coined by Clark Abt in an eponymous 1970 book, which versed on both computer and “manual” games, and which at one point praised “human-operated” models for being “an inexpensive and relatively unthreatening means of experimentation” in education.¹⁵³

This rich legacy of serious board games has fortunately found its champions in more recent years. In 2012, Jeremy Antley criticized the trend followed by many digital humanists to prioritize electronic games while “leaving the venerable tradition of manual board gaming to the relative wayside.”¹⁵⁴ In 2017, *Games Studies*, a pioneering scientific journal for research on computer games, announced that it would no longer restrict its scope to computer games. According to editor-in-chief Espen Aarseth, “for most of the field, in practice, as well as in theory”, digital and non-digital games have never been truly segregated.¹⁵⁵ Journals dedicated exclusively to analog games, such as

151 Commercial board games are a testament to that fact, counting with titles that remain popular over half a century after being first developed, like Diplomacy (1959), Monopoly (1935; 1903 as *The Landlord's Game*), or the *Star of Africa* (1951). This, of course, not to mention truly ancient games like go or chess, which are not only still popular, but also still used as starting points or analogies for serious modeling. It is noteworthy in that regard that Thomas Schelling’s “tipping game”, arguably the first ABM, was originally “run” using a checker’s board. SCHELLING, Thomas C., **Micromotives and Macrobehavior**, New York/London: Norton, 1978, p. 147–50.

152 PETERSON, Jon, A Game Out of All Proportions: How a Hobby Miniaturized War, in: HARRIGAN, Pat; KIRSCHENBAUM, Matthew G. (Orgs.), **Zones of Control: Perspectives on Wargaming**, Cambridge, Mass: MIT Press, 2016, p. 3–31, Hellwig.

153 ABT, Clark C., **Serious Games**, [s.l.]: University Press of America, 1987, p. 26–27.

154 ANTLEY, Going Beyond the Textual in History, p. 12.

155 AARSETH, Espen, Just Games, **Game Studies**, v.17, n.1, 2017. Available at: <<http://gamestudies.org/1701/articles/justgames>> (Access Date: 16/12/2021)

Analog Game Studies (2013-) and *Board Game Studies Journal* (2016-) have also been established in recent years.

Proponents of modelling via board games not only argue that these artifacts are comparable to videogames or ABMs, but also that they might be even better suited to some tasks. Antley argues that videogames are inherently opaque to scrutiny, requiring players to push the boundaries of the game to understand its arguments. Manual games, on the other hand, do not hide anything from users. “The player can dispense with the never-knowing and move straight to analysis and interpretation”.¹⁵⁶ Graham, who alongside Tom Brughmans and Iza Romanowska developed the scholarly board game *FORVM: Trade Empires of Rome*, posits that board games are more flexible than videogames because, unlike the latter, they do not force players to “perform its creators’ ideas about how the world-space works”; rather, they can rely on ‘house rules’ – unofficial modifications created by the players themselves – to achieve results comparable to software modding.¹⁵⁷ Philip Sabin further adds that board games far better than videogames in this regard, as they “expose their rules systems as a necessary component of learning to play them”.¹⁵⁸ Their “code”, after all, is their very manual.

ABM and serious board games, therefore, are two sides of the same poker chip: a methodology that relies on designing models and simulations to gain better insight about the real world outside them. They are very different and complement each other’s weaknesses: ABM is an essentially quantitative research technique that relies on statistics and produces replicable results; board games are qualitative, cooperative and exploratory, “best used to investigate the decision processes of its players and how these processes interact.”¹⁵⁹ They are both, each in their own way, suitable to representing the complexities of medieval disasters.

156 ANTLEY, *Going Beyond the Textual in History*, para 12.

157 GRAHAM, Shawn, **The Making of FORVM: Trade Empires of Rome**, *Electric Archaeology*, Available at: <<https://electricarchaeology.ca/2018/11/12/the-making-of-forvm-trade-empires-of-rome/>>. Access date: 17 dez. 2021.)

158 SABIN, Philip, *Wargames as an Academic Instrument*, in: HARRIGAN, Pat; KIRSCHENBAUM, Matthew G. (Orgs.), **Zones of Control: Perspectives on Wargaming**, 1st edition. Cambridge, Massachusetts: The MIT Press, 2016., *Manual vs. Computer Wargames*, para 6.

159 PERLA, **The Art of Wargaming.**, Chapter 9, “Integrating Wargames with Operations Analysis and Exercises”, “definitions”, para 1.

1.4. What this thesis will accomplish

This thesis will draw from both the literature on ABM and the tradition of serious board games to model the interplay of environmental/economic extreme events and military conflicts in 13th and 14th century Thomond. Both ABM and game will be based on the same conceptual model, but each simulation will be employed in a way that makes better use of its particular strengths. The ABM, called ThomondSim, will be the core of the project. I will develop it using the programming environment NetLogo¹⁶⁰, and will use it to make experiments and generate data which will be quantitatively analyzed to test my research hypothesis. The board game will be called *The Triumphs of Turlough*, in reference to a well-known 14th century prose tract known in its original Irish as *Caithréim Thoirdhealbhaigh* (henceforth CT).¹⁶¹ Written in the mid-14th century by Séan Mac Ruaidhrí mac Craith, a poet on the employ of the victorious faction in the Uí Bhriain civil war, it is a crucial narrative sources for the events of 1276-1318 in the kingdom of Thomond.¹⁶² Its main purpose in the project will be in providing data validation, allowing each iteration of the conceptual model to be shared with other historians and archaeologists and their feedback to be incorporated back into the code. *The Triumphs of Turlough* will also be used for qualitative exploratory testing of the conceptual model's elements and collective development of specific sub models that require a lot of trial and error.

This, however, is as far as theory alone will take us. Before deciding on what kind of model is more appropriate to investigate the impact of extreme events on Thomond, we must first how much information we have about that particular past, and which logical, epistemic and interpretive issues our evidence pose. This will be the subject of the following two chapters.

160 WILENSKY, U. **NetLogo**. Evanston, 1999. Available at: < <http://ccl.northwestern.edu/netlogo/>>
Access date: 27 Jan. 2022.

161 O'GRADY, Standish (Org.), **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929.

162 On the historical relevance of the text, Cf. WESTROPP, Thomas Johnson, On the External Evidences Bearing on the Historic Character of the "Wars of Torlough," by John, Son of Rory Mac Grath, **The Transactions of the Royal Irish Academy**, v. 32, Section C: Archaeology, Linguistic, Literature, p. 133–198, 1902; NIC GHIOLLAMHAITH, Aoife, Dynastic warfare and historical writing in North Munster, 1276-1350, **Cambrian Medieval Celtic Studies**, v. 2, p. 73–89, 1981.

Chapter 2

The Spatial Environment

The wars of 1276-1318 between Clann Taidhg and Clann Brian Ruad Ó Bhriain were fought over (and within) a very specific space. To say that this space was Thomond, a land that stretched “from the famous Cúchullain’s Leap of old to Borúimhe’s Crossing”¹⁶³ by the Shannon river does little to account for its agency. This was a space that both facilitated and hindered military activity, constraining movement through well-connected regions and dissuading armies from venturing into marshy, heavily wooded areas. It was a space that reflected and reinforced political bonds/hierarchies, in which overlords could easily reach their vassals and geographic “buffer zones” mirrored political ones. It was also through changes in this space that the effects of the environmental and economic hazards of the 1310s event may have tilted the balance of the conflict: turning roads into quagmire, ravaging croplands and pastures, amplifying the damages of raiding and potentially forcing resource-starved communities to change their habits.

Understanding these dynamics is a central part of ABM analysis. Unfortunately, to reconstruct the features of space needed to visualize such dynamics we must first address a pernicious bias: the idea that political entities, whichever they may be, can be understood as discrete spaces with particular – and homogeneous – characteristics. For our contemporary minds, clouded by our familiarity with modern maps and hard borders, it is tempting to look at a distribution of neatly defined cantreds, parishes and townlands and imagine that those borders were something more than abstract constructs – often invisible to the very historical agents that inhabited them.

To James C. Scott, part of the blame resides in the enduring convention of writing about peoples and power through the lenses of the modern national state, a habit rightfully problematized as a “tyranny of a concept”¹⁶⁴ but no less tyrannical, it would seem, in shaping our unconscious biases. Scott notices that the literature on state-making dwarfs that of statelessness, even though “state” is so recent an invention that is

163 O’GRADY (Org.), *Caithréim Thoirdealbhaigh*, p. 1.

164 DAVIES, R. The Medieval State: The Tyranny of a Concept? *Journal of Historical Sociology*, v.16, n.2, 2003, pp. 280-300

not an exaggeration to say that “living in the absence of state structures has been the standard of human condition”.¹⁶⁵ Prior to the advent of “distance demolishing” technologies such as all-weather roads, railways and telegraphs, he argues, even the most formidable states were demographically and geographically diminutive, living in symbiosis with peoples who technically dwelled within their “borders” but who, in practice, inhabited territories too remote, dangerous or difficult to access to be worth the effort to be properly subdued.¹⁶⁶

Central to this dynamic is the concept of friction of terrain.¹⁶⁷ Political authority, he illustrates, can be understood as a bucket of paint thrown over a tridimensional relief map. If tilted slightly to one side, paint would flow through the “easy” paths of plains and waterways, while avoiding the “hard” obstacles of swamps, hills and mountains.¹⁶⁸ The higher the angle at which we have to tilt our map to paint every nook and cranny, the more political effort is needed to keep a given territory under sway. Easily accessible lowlands can be conquered almost effortlessly; subduing a rugged, steep landscape might require tilting our fictional map almost to a 90-degree angle.

If, as Scott postulates, friction of terrain is integral to the spread of state authority, it follows that the fortunes of political powers are directly related to the ease of transport and communication. It is the capacity to haul food and other goods over long distances, to receive subjects and tributes, to ensure emissaries get their messages to their destinations, to send troops quickly to counter threats and pacify a population that ultimately underlines whether a political center is fit to be the “center” of anything at all. Within this framework, speaking of political entities as discrete territorial units makes little sense. A collection of port cities scattered among the islands of an archipelago can be more coherent as a political unit than a contiguous territorial empire crisscrossed by mires and mountain ranges.

There are many ways in which the political configuration of late 13th and 14th century Ireland – a period traditionally heralded as that of the maximum expansion and

165 SCOTT, James C., **The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia**, New Haven/London: Yale University Press, 2009, p. 3, 11.

166 *Ibid.*, p. 5,11.

167 *Ibid.*, p. xi.

168 *Ibid.*, p. 57.

beginning of decline of the English Lordship of Ireland ¹⁶⁹ -- differs from the “stateless” peoples of Zomia, a social space spanning present-day Vietnam, Cambodia, Laos, Thailand, Burma and China which Scott analyzes as a case study. Yet, the idea that the Irish landscape –or, at the very least, parts of it – could be inhospitable to its English conquerors might not be entirely out of place. According to Kenneth Nicholls, there was a direct correlation between areas of the country dense with woodland and the limits of English settlement, as thick vegetation was less profitable than open plains and more dangerous to subdue, as they provided refuge for brigands and rebellious armies.¹⁷⁰ Tilting this map so that the “paint” of English authority could penetrate these obstacles, to use Scott’s metaphor, took concerted military effort, which was not undertaken in full until after the reign of Elizabeth I and the Nine Year’s War (1593-1603).

If Nicholls is correct, it follows that the impact of English encroachment during the expansion of the Lordship in the 13th century would show variations based on the specific environmental conditions of each region of Ireland. In this chapter, I will attempt to survey the spatial profile of the kingdom of Thomond during the wars of 1276-1318. In the first section, I will introduce the main types of settlements that acted on and were acted upon the English and Irish elites during wartime: castles, *longphoirt* and monasteries. Subsequently, I will propose a reconstruction of three landscape elements that directly contributed to friction of terrain: woodlands, mires and routeways. The final section will explain how all of these elements will integrate the conceptual model behind ThomondSim and *The Triumphs of Turlough*

169 OTWAY-RUTHVEN, A.J. **A History of Medieval Ireland**. New York: Barnes & Noble, 1968, p.191; LYDON, J. **The Lordship of Ireland in the Middle Ages**. Dublin: Four Courts, 2003, p. 75; FRAME, R. **Colonial Ireland 1169-1369**. Dublin: Four Courts, 2012 (1st edition 1981), p.57

170 NICHOLLS, K. Woodland cover in pre-modern Ireland, *in*: DUFFY, Patrick J.; EDWARDS, David; FITZPATRICK, Elizabeth (Orgs.), **Gaelic Ireland, c.1250-c.1650: Land, Lordship and Settlement**, Dublin: Four Courts Press, 2004, p. 181.

2.1. Settlements

A full description of the political landscape of Thomond will have to wait until Chapter 3, in which I will provide an overview of the English and Irish systems of government and social organization, a description of Thomond's political divisions, as well as a brief account of the history of the region – and of Ireland as a whole – leading up to the wars of 1276-1318.

This section will introduce features of this political landscape at a more granular level: settlements built by secular and ecclesiastical elites that played a role in military logistics and the broader economy of Thomond's lordships and kingdoms.

Castles



Figure 4: Ruins of Quin castle, now Quin Franciscan friary, showing a cross section of one of the old towers. Photo by the author (2020).

Andrew Saunders defined a castle as a “fortified residence which might combine administrative and judicial functions but in which military considerations were paramount.”¹⁷¹ They could serve as seats for the secular elite and were important tools for power projection of both a symbolic and literal nature. Castles were usually the *capita* of manors, the basic unit of seigneurial administration in both England and English-controlled Ireland.¹⁷² In addition to its defences, castles counted with (often substantial) garrisons that could attack, harass and spot the movement of enemy parties, effectively creating a zone of control over the surrounding landscape. According to the Irish pipe rolls, Bunratty castle, seat of the de Clares in Thomond, had a garrison of 95 men in 1318, a contingent comparable to a small Gaelic army.¹⁷³

What set castles apart from other types of fortifications is a matter of Much contention. Historiographically, the term has long been paired with feudalism to denote a distinguished type of settlement found Only in this political regime. In other words, a castle would be above all a fortress built by a “feudal” society – with the corollary that a fortress built by “non-feudal societies” could not be called castles.¹⁷⁴ As a consequence, the word “castle”, in the Irish context, quickly became a synonym for strongholds built by the English. The gradual abandonment of the feudalism model following critiques by Elizabeth Brown and Susan Reynolds made that definition problematic.¹⁷⁵ While some authors stood their ground by associating castles with a “feudal” order in all but name¹⁷⁶, others advocated for broadening their definition or stop obsessing over terminology altogether. Thus, Charles Coulson granted that “fortresses were especially characteristic of the European middle ages [sic]”, but insisted that “there was not much about them, even architectually, which was exclusively medieval”, and less so that

171 SAUNDERS, Andrew, Five Castle Excavations: reports of the Institute’s project into the origin of the castles in England, *Archaeological Journal*, v. 134, n. 1, p. 1–156, 1977, p. 2.

172 Cf. Chapter 3.5, “Economic and Logistics”, subsection “Economy and Logistics in English Thomond”, below.

173 **The 42nd Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, Dublin: Cahill & Co., 1911, p. 21.

174 MCNEILL, T. E., **Castles in Ireland: Feudal Power in a Gaelic World**, 1st edition. London and New York: Routledge, 2005, p. 9; WHEATLEY, Abigail, **The Idea of the Castle in Medieval England**, Woodbridge: Boydell & Brewer, 2004, p. 7–8.

175 BROWN, Elizabeth A. R., The Tyranny of a Construct: Feudalism and Historians of Medieval Europe, *The American Historical Review*, v. 79, n. 4, p. 1063–1088, 1974.; REYNOLDS, Susan, **Fiefs and Vassals: The Medieval Evidence Reinterpreted**. Oxford: Clarendon Press, 1996.

176 Cf. e.g. MCNEILL, T. E., Castles, *in*: DUFFY, Seán (Org.), **Medieval Ireland: An Encyclopedia**, New York/London: Routledge, 2005, p. 67.

could be called “feudal”.¹⁷⁷ Terry Barry noticed that Irish words derived from the Latin *castellum*, like *caisté*l or *caislén*, appear in early 12th century annal entries, suggesting the concept of a “castle” already existed in Ireland prior to the coming of the English.¹⁷⁸ The polysemy of the term finds echo in the nature of the archaeological record. English castles, Barry writes, existed in all shapes and sizes, from large stone fortresses with towers and curtain walls to simple motte and bailey structures, and even refashioned early medieval Irish farmsteads.¹⁷⁹

Regardless of how we choose to call them, during the wars of 1276-1318 at least, there is a marked difference between strongholds built by the Irish and those built and/or maintained by the de Clares in Thomond. While our knowledge of the former is marred by lack of archaeological evidence (see “*Longphoirt*”, below), the latter were distinctively imposing and heavily fortified stone fortresses.

Only two English castles were operational during the wars of 1276-1318, although others were built and subsequently abandoned in previous decades. The most important was Bunratty, *caput* of the manor of the same name, which served as the seat of power for the de Clares during their involvement in the region. The construction of the castle likely started in 1251 at the behest of the first de Clare’s predecessor, Robert de Muscegros.¹⁸⁰ After the battle of Dysert O’Dea, the castle fell into disrepair, and in 1332 was eventually taken by the Uí Bhriain and their vassals, the Mic Conmara of Clann Chúillen.¹⁸¹ The castle changed hands a few times during the Later Medieval Period, but was in Uí Bhriain hands by the 16th century.¹⁸² The second fortress was Quin, possibly built between 1278 and 1280 and situated at the very edge of de Clares’

177 COULSON, Charles L. H., **Castles in Medieval Society: Fortresses in England, France, and Ireland in the Central Middle Ages**, Revised ed. edição. Oxford: Oxford University Press, USA, 2004, p. 9.

178 BARRY, Terry B., **The Archaeology of Medieval Ireland**, New York/London: Routledge, 2003, p. 54.

179 BARRY, Terry, The study of medieval Irish castles: a bibliographic survey, **Proceedings of the Royal Irish Academy. Section C: Archaeology, Celtic Studies, History, Linguistics, Literature**, v. 108C, p. 115–136, 2008, p. 37. Overview, p. 37

180 SWEETMAN, Henry Savage (Org.), **Calendar of Documents Relating to Ireland, 1171-1251**, London: Longman, 1875, p. 465, No. 3126.

181 “*Eodem vero tempore, castrum de Bonrat (quod multorum iudicio inexpugnabile videbatur); per O’Brein et Mc Nemare destruitur.*” AClyn 1332.4. BUTLER, Richard (Org.), **The Annals of Ireland. By Friar John Clyn, of the Convent of Friars Minors, Kilkenny; and Thady Dowling, Chancellor of Leighlin. Together with the Annals of Ross**, Dublin: The Irish Archaeological Society, 1849, p. 24.

182 BRADLEY, John, The Medieval Borough of Bunratty, **North Munster Antiquarian Journal**, v. 30, n. 3, p. 19–25, 1988, p. 24–25.

zone of control in Thomond.¹⁸³ After the retreat of the de Clares, the castle was taken by the Meic Conmara of Clann Chúillen, and later became a Franciscan friary under sponsorship of the lineage, the ruins of which can still be seen today. In the late 14th century, the Mic Conmara built a tower house of their own, Daingean Uí Bhígin, not far from the previous English stronghold, which served as their seat of power.¹⁸⁴

Unfortunately, unlike Bunratty and Quin, most Irish fortresses of the 1276-1318 period did not survive the test of time. Yet, the evidence still at our disposal, such as textual descriptions, seem to suggest they are comprised a much more heterogeneous group than the de Clare castles. In the context of this thesis, I will refer to them by a name commonly employed by the Irish narrative sources: *longphoirt*.

Longphoirt

183 “*Casslean Cunchi do tinscedul le Thomas de Clara, acus bith deo aga denumh*”. AI 1279.4. MAC AIRT, Séan (Org.), **The Annals of Inisfallen**, Dublin: Dublin Institute for Advanced Studies, 1244, p. 374.

184 MCINERNEY, Luke, A fourteenth-century poem on the Meic Conmara lords of Clann Chuiléin, **Studia Hibernica**, v. 40, p. 35–60, 2014, p. 125.

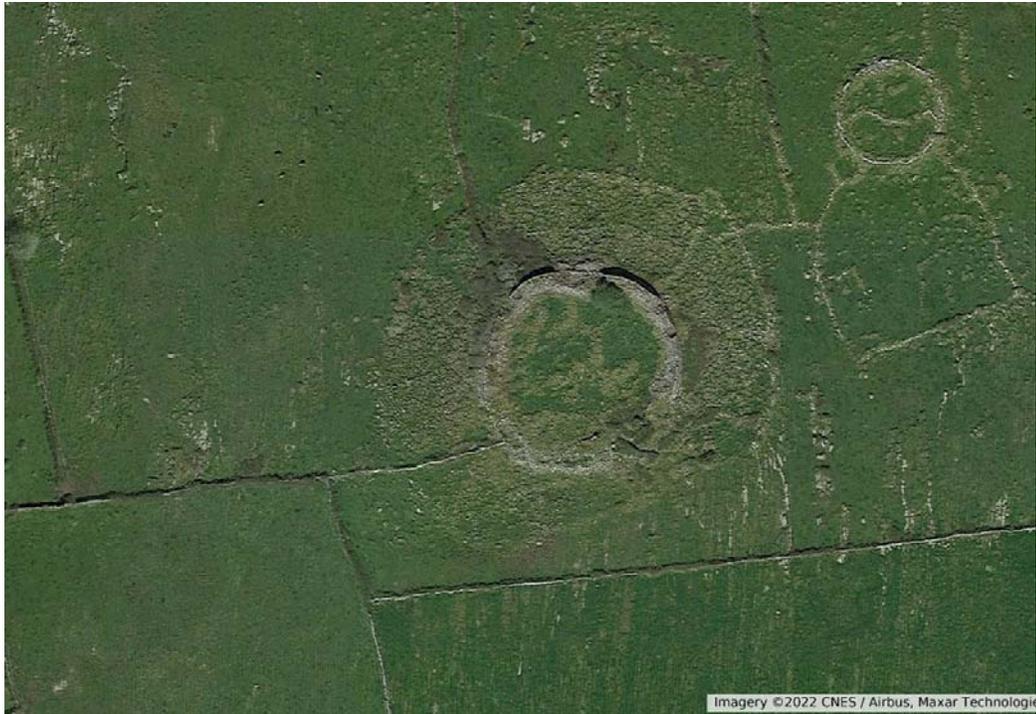


Figure 5: Satellite image of Caherballykinvarga, ceann áit of the Uí Conchobhair kings of Corcamruadh. Photo by Google Maps, © 2022 CNES/ Airbus, Maxar Technologies.

Longport is a generic name for a Gaelic secular residence, often the abode of a king or local chief.¹⁸⁵ The types of settlement it referred to included buildings as varied as *ráthanna* (sg. *ráth*) – ringforts with earthen ramparts – *caisil* (sg. *caisel*) – a “stone-wall, rampart or stone fort”¹⁸⁶ – *cathracha* (sg. *cathair*) – a West Ireland term for a “stone enclosure, fortress, castle and dwelling”¹⁸⁷ –, *insí* (sg. *inis*, lit. “island.”) – a dwelling situated on an island – *crannóga* (sg. *crannóg*) – a fortress on an artificial (or artificially reinforced) island – as well as temporary camps. The term sometimes appears in a qualified form in the sources, such as *mórlongport* (“great/large *longport*”)¹⁸⁸, *ríglongport* (“royal *longport*”)¹⁸⁹, or *foslongport*¹⁹⁰ (“resting *longport*”, probably an encampment rather than a permanent structure).

185 FITZPATRICK, Elizabeth, Native enclosed settlement and the problem of the Irish ‘Ring-fort’, 2009, p. 275.

186 *Ibid.*, p. 274.

187 *Ibid.*, p. 275.

188 “*Iar sin téid Cúmeda dá mórlongport*” O’GRADY (Org.), *Caithréim Thoirdealbhaigh*, p. 11.

Just like English castles, some *longphoirt* served as seats for Irish lineages, in which capacity they could also be called *ceann áit* (“head place”). Unlike the English, however, Irish kings had no qualms about abandoning their residences in times of war, sometimes destroying their own fortifications to prevent them from falling into enemy hands.¹⁹¹ That this strategy was even practical to begin with owes to the fact that Irish kings accumulated wealth in the form of cattle and other chattels that could be easily relocated in times of war.¹⁹² A single lineage could also control a large number of *longphoirt* within a single polity, sometimes making it a challenge to contemporary historians and archaeologists to identify which one functioned as a *ceann áit*. As an example, the CT credits Toirdhealbhach Ó Briain [9] with building six different longphoirt, and gives him at one point the epithet *na longport lán* (“of the crowded longphoirt”).¹⁹³ In another passage, a commander under orders of the same Toirdhealbhach assaults three forts (*dúintib*) belonging to an enemy at the same time, as they could not guess in which location their foe would be.¹⁹⁴

Extant evidence on the nature of these holdings is sadly lacking. Caherballykinvarga (*Cathair Baile Cinn Mhargaidh*), *ceann áit* of the Uí Conchobhair of Corcamruadh, survives in the landscape, and is, as the name indicates, a *cathair*. The Uí Bhriain stronghold of Inchiquin (from the Irish *Inse Uí Chuinn*, “O’Quin’s Island”) was located on an island of the same name. The CT describes the fortress as “stone-fashioned” (*clochdenmach*), suggesting it counted with stone walls of some kind.¹⁹⁵ The *ceann áit*

189 “*agus do an gach ri ina riglongport*” *Ibid.*, p. 134.

190 “*do suidh Muirchertach O Briain foslongport ar foirimell na cóigcríche dá cosnam*” *Ibid.*, p. 138.

191 FITZPATRICK, Elizabeth, Rethinking settlement values in Gaelic society: the case of the cathedral centres, **Proceedings of the Royal Irish Academy: Archaeology, Culture, History, Literature**, v. 119C, p. 69–102, 2019, p. 2.

192 For the use of cattle as a kind of currency, Cf. Chapter 3, “Economy and Logistics”, subsection “Economy and Logistics in Irish Thomond”, below.

193 “*agus táinic in triathlaomárdrigh toiscebeoda Torrdelbach ele d'indsaighid a longpuirt gu laomchobsaídh co cluain rathmair réidhfairsing riascaibnigh righfoirgnemaigh rámfoda [agus is é an Toirdelbach so dorigne caislén innte agus is lais fòs dorignedh an chédobair chloiche i múr innse do'n taobh tiar di amail adeir an file san rann so:— Toirdelbach na longport lán. do chédchuir cloch am chertlár; 's i múr innsi do'n taobh tiar. nírlingsi aon re hainmian]*”. O'GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 24.

194 “*Is amlaid ro órdaigh Donnall in degcelg sin: na trí bailedha a mbiadh Donnchad re halt na haidheci sin, a nindsaighid co calma gan choigill; agus nach biadh do congnam ag in cathmílid do'n chur sin acht a gnáthlucht tighi agus a teglach ónduair do fuagair Donnall agus degCongalach agus in dá oirecht uile ar aonslighid hé agus do gluais Tordelbach co tinnesnach ina ruathar rechtadbal re srebaib na sruthfáirgi siar, agus do ghéiretar in gasradh sin co grednach grodcomarcach fá trí dúintib Donnchaid co deglamaigh, óir ní fhedatar cá hinad acu inar fhoisdinigh isin oidchi sin.*” *Ibid.*, p. 22.

195 “*táinic ina thromruathar timdeithnis teithid go hinnse clochdenmach caladréid ciumasgarb i Chuinn*”. *Ibid.*, p. 70.

of the Uí Bhriain in Thomond was called *Cluan Rámhfada* (“Meadow of the Long Oar”) was and situated on a island near the present-day city of Ennis.¹⁹⁶ Interestingly, the CT at one point refers to it as a *caislén*¹⁹⁷, which prompted Westropp to confidently describe it as a “castle”.¹⁹⁸ According to Mac Craith’s prose tract, it was originally constructed as a circular (*circallda*) building by Domhnall Cairprech Ó Briain [2]¹⁹⁹, then upgraded to a permanent *longport* (*longport comnaide*) by his successor Conchobhair ‘na Siúdaine’ Ó Briain [4],²⁰⁰ then finally to a castle (*caislén*) by Toirdhealbach Ó Briain [9]. Whether this castle resembled a tower house – narrow keeps built in large numbers by both the Irish and the English from the mid-14th to the 17th centuries – or followed the circular structure of its predecessor is an open question, as no traces of the stronghold survive to the present date.

Monasteries

196 HUNT, John, Clonroad More, Ennis, **Journal of the Royal Society of Antiquarians in Ireland**, v. 76, p. 195–209, 1946.

197 “*agus is é an Toirdel bach so dorigine caislén innte*”. O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 24.

198 WESTROPP, Thomas Johnson, On the External Evidences Bearing on the Historic Character of the “Wars of Torlough,” by John, Son of Rory Mac Grath, **The Transactions of the Royal Irish Academy**, v. 32, p. 133–198, 1902, p. 156.

199 “*dorigine foirgnemh agus flaithisdad circallda nó comchruinn comnaide i gcertmedón a oirecht agus a uasaltuath do’n táib tuaid do’n tsruth re hucht innse in laoigh [áit] re [a] ráiter cluain rigda riascaibnech rámfada in tan so*”. O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 2.

200 “*tucatar a mbraigde agus a mórchonách leo go cluain rigfoirgnemaig rámfada, óir is ann d’áitig in cáimrí Conchobar, agus is é cédduine dorigine longport comnaide criad isin inad sin é*”. *Ibid.*, p. 4.



Figure 6: Corcomroe Abbey, Northwestern Thomond. Photo by the author (2020).

Secular holdings were not the only settlements that played a role in the wars of 1276-1318. Religious houses sponsored by both de Clare and the Gaelic chief lineages dotted the landscape of Thomond and were fundamental cogs in its economy.

Following the English Invasion and subsequent colonization, the Church in Ireland was informally divided into two spheres of influence: *ecclesia inter Hibernicos* and *ecclesia inter Anglicos*.²⁰¹ Most of the monasteries in Thomond belonged to the suffragan dioceses of Kilfenora and Killaoe, both part of *ecclesia inter Hibernicos*. As such, the clergy was predominantly of Gaelic extraction, and very often drew ecclesiastics from the same secular lineages that ruled their respective parishes.

Monasteries provided secular rulers with religious and burial services, places of spiritual retreat for elderly members of the lineage, ecclesiastical careers for children who did not inherit land or titles. Some, like Ennis Friary and Clare Abbey, counted

²⁰¹WATT, J. A., *The Church and the Two Nations in Medieval Ireland*, Cambridge: Cambridge University Press, 1970, p. 2; Ó CLABAIGH, Colmán, *The Church, 1050–1460*, in: SMITH, Brendan (Org.), *The Cambridge History of Ireland: Volume 1: 600–1550*, Cambridge: Cambridge University Press, 2018, v. 1, p. 362.

with *scriptoria* – workshops in which manuscripts were produced – and cattle herds that could be culled to produce vellum. As such, they were able to produce literary works that suited the interests of their aristocratic patrons. A principal monastery under the lineage’s patronage was also one of the components of what D. Blair Gibson called a “capital set”, a trio of (not necessarily) contiguous elements that comprised the capital of an Irish kingdom.²⁰² Powerful lineages such as the Uí Bhriain were patrons of many monasteries, both around their *ceann áit* in Clonroad and around Thomond.

While it would be a stretch to call most monasteries ‘towns’, these settlements may have concentrated more people than their present-day ruins suggest. As Fitzpatrick remarked, “If urbanisation was mostly eschewed by Gaelic society as an approach to settlement, nucleation was not”, and monasteries could become nodes of an agglomeration of houses.²⁰³ Larger monasteries, such as the cathedral centres of Kilfenora and Kilmacduagh, were often clusters of building in their own right, with a core monastery structure orbited by ancillary facilities a few hundred meters apart from one another.²⁰⁴ These churches were also surrounded by large tracts of sanctuary land known as *termon* – from the Latin *terminus* via the Irish *tearmann*, meaning “boundary”.²⁰⁵ These lands were administered by hereditary tenants known as *coarbs* and *enenaghs* (from the Irish *comharba* and *airchinnech*) – who paid rent and owned services to the local bishop.²⁰⁶ While church revenues were generally exempt from secular taxation, Irish kings often found workarounds to make use of monastery resources – for example, via a type of predatory wartime exaction known as *coyne & livery*.²⁰⁷

Due to their resources and close connections to lineages ruled over Irish kingdoms, it is not surprising that monasteries would be prominently featured in narrative accounts of the wars of 1276-1318. As will be seen in section 2.4. below, they were often the

202 The others were the *ceann áit* and the royal inauguration mound. Cf. Gibson GIBSON, D. Blair, **From Chieftdom to State in Early Ireland**, Cambridge: Cambridge University Press, 2012., Chapter 3: Clare’s chieftdoms at the dawn of history., Caherballykinvarga: Capital of the CorcuModruad, para 4.

203 FITZPATRICK, Rethinking settlement values in Gaelic society, p. 2.

204 *Ibid.*, p. 19–20.

205 *Termonn*, in: **eDIL: An Electronic Dictionary of the Irish Language, based on the Contributions to a Dictionary of the Irish Language (Dublin: Royal Irish Academy, 1913-1976)**, [s.l.: s.n.], 2019. Available at: <<http://www.dil.ie/40562>> (Access Date 17/01/2022)

206 NICHOLLS, Kenneth W., **Gaelic and Gaelicized Ireland in the Middle Ages**, Dublin: Lilliput Press, 2003, Glossary. MCINERNEY, Luke, Clerics and Clansmen: The Vicarages and Rectories of Tradraige in the Fifteenth Century, **North Munster Antiquarian Journal**, v. 48, p. 1–21, 2008, p. 2–3.

207 Cf. Chapter 3, “Economy and Logistics”, “Economy and Logistics in Irish Thomond” below.

destination of raiding armies, who sought them either to despoil their lands or to look for shelter after a day's march.

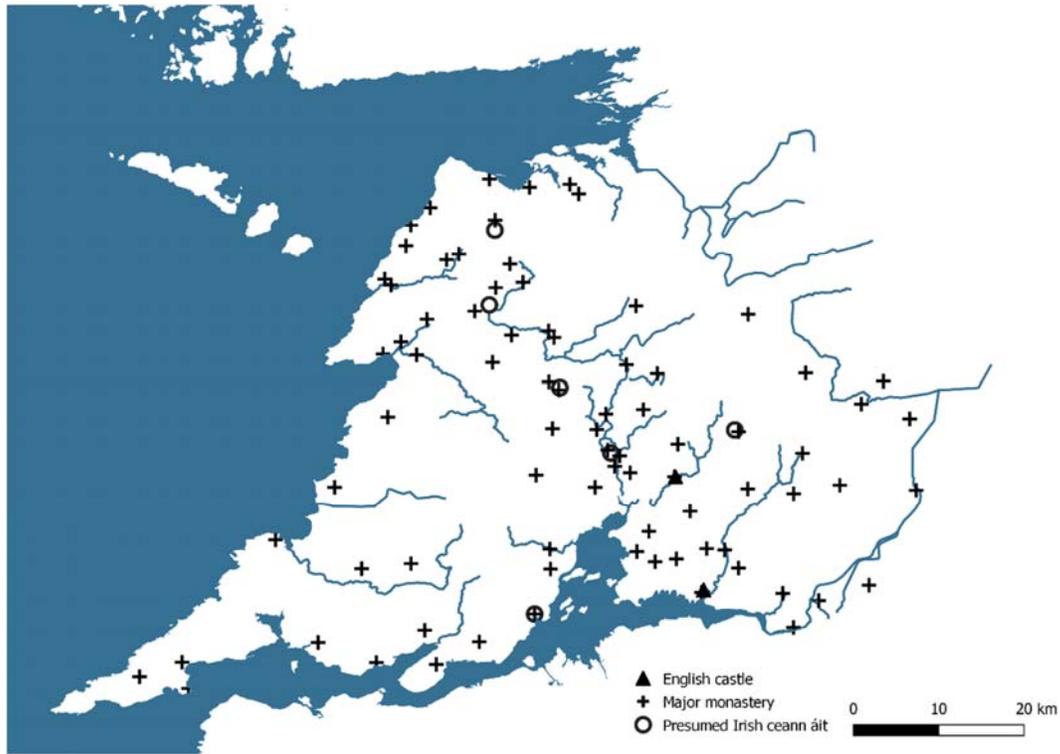


Figure 7: Major settlements in Thomond during the wars of 1276-1318

2.2. Woodlands

In both Irish and English sources, woods are often mentioned as hiding places for armies and herds. In 1278, for example, Domhnall mac Tadhg Ó Briain [10] sought the woods of Brentír to rest after a costly campaign.²⁰⁸ In 1281, king of Thomond Toirdhealbhagh Ó Briain [9] found himself overwhelmed against a Cenél Fermaic army. With only nine riders under his command, his ally Cumea Mac Conmara held his

²⁰⁸ “Do gluaisetar in ghasrad ghormabrach ghnáthcoscrach ghním láidir fiartimchell na fintíre; agus ní rángatar tulaig gan tachar, ná áth gan imresain, ná glenn gan gnimécta, go gormchailtib bogtrédacha binneltacha braontoirtecha na bréntire. do gabatar fos isna fintírib agus isna fáschailtib sin” O’GRADY (Org.), *Caithréim Thoirdhealbhagh*, p. 13.

enemies at bay long enough for him to hide his cows in the woods of Echtge.²⁰⁹ It is noteworthy that Dysert O’Dea, the battle that sealed the fate of the English in Thomond, took place in a woodland. According to the CT, Richard de Clare struck against Clann Taidhg by invading Cenél Fermaic, where the local lineage, the Uí Dheadhaigh, attempted to ambush them twice before retreating to a wood. The natural hazards of the wooded terrain paired with the mettle of the Uí Dheadhaigh warriors held down the English long enough for their allies the Uí Aichir, Uí Conchobhair and Uí Brian armies to arrive, routing de Clare’s forces.²¹⁰

The Irish talent for turning woods into veritable deathtraps was already well-known to the English. In his *Expugnatio Hibernica*, Giraldus Cambrensis described Gaelic warriors reinforcing woods with man-made obstacles – including, in one occasion, a whole network of trenches and subterranean passages.²¹¹ While Giraldus is known for painting the Irish in a malicious light, more reliable sources corroborate his observations on this topic. G.A. Hayes-McCoy found evidence of similar tactics employed as late as the 16th century²¹², and the CT gives a similar account for the 14th, mentioning “a strong fence” built to protect cattle while hiding in a wood.²¹³ To Kenneth Nicholls, the military importance of these woodlands was so significant that it is correct to speak of a direct correlation between the density of woodland cover and the patterns of English settlement. Woodlands were less economically interesting than arable farmlands and facilitated Irish resistance, to the point where they traced the very “limits of Anglo-Norman occupation and settlement”.²¹⁴ The proximity of woods to highways was a particular cause of concern. Under the cover of the trees, Irish raiders

209 “*agus tucatar slán na sluagchrecha sin co slis Echtghi uillendgairbe, agus do scáiletar dá sciamlongportaib gan scáthebla.*” *Ibid.*, p. 19.

210 SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p. 142–144.

211 “*In loco igitur quodam non procul a Fernis, silvis densissimis, et montibus praeruptis, aquis et paludibus orbiculariter obsito, sui que natura situ que valde inaccessibili, cum suis se contulit. Ubi et statim, procurante Stephanide, concidibus insistens, prostratis arboribus, lignisque consortis silvas undique condensans, puteis altis, foveisque profundis campos exasperans, introitus et exitus occultos et arctos per varios anfractus insultibus aptans, loca denique sibi suisque pervia hostibus in via reddens, naturalem difficultatem industria plurium et arte munivit.*” GIRALDUS CAMBRENSIS. *EXPUGNATIO HIBERNICA*, **Giraldus Cambrensis Opera V.5**, London: Longmans, Green, Reader, and Dyer, 1867, p. 237.

212 HAYES-MCCOY, Gerard Anthony, **Irish Battles**, London: Longmans, Green, and Co., 1969, p. 35.

213 “*agus ó nach rucatar clann Cuilén díl a saindii ar na saorclannaib re [a] marbad isin maidm sin, tucatar dianruathar fá daingenbuailtib na ndúngalach agus tucatar comach ar na clandmaicnib sin, gur ba díth dá ndáinibh*” SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, p. 79.

214 NICHOLLS, Woodland cover in pre-modern Ireland, p. 181.

could set up ambushes to harass armies, slaughter agents of the Crown, disrupt supply lines and asphyxiate communications between the central government and the frontier. Woodlands could also negate technological advantages the larger and better funded English armies might have brought to the table. Natural and human-made obstacles were a hazard to cavalry, trees and branches acted like a screen against longbowmen and crossbowmen. Whether or not these woods actively prevented English settlement or the absence of English settlement itself allowed the woods to thrive is hard to tell, as Nicholls himself is quick to point out.²¹⁵ Still, the correlation can hardly be overstated by the sources. The ordinances from a general parliament in Ireland in 1297 order lords of the woods to clear paths through the vegetation to hinder those Irish “confident in the thickness of the woods and the depth of the nearby bogs”, who

quickly summon the audacity to do mischief, especially given that the King’s highways in a great many places are already [so] overgrown and obstructed by the thickness of the rapidly growing woods that hardly anyone can pass through them on foot, and that the Irish, retreating after their misdeeds, can reach this sort of wood or bog, [and] although the common country people [*compatriote communiter*] might wish to pursue them (and do pursue them) they frequently escape without losses whereas if access were open they would be caught by those who pursue them.²¹⁶

A similar concern is expressed in the 1285 Statutes of Winchester, ordered to be enforced in Ireland in 1308.²¹⁷ The text is careful to specify that “ditches, underwood [and] bushes” (*fosse, suthboys, ou bussuns*) should be cleared, while leaving out the oaks and the “great woods” (*gros fusz*).²¹⁸ As Nicholls points out, the more degraded,

215 *Ibid.*

216 “*Hibernici eciam de densitate boscorum et profunditate morarum adiacensium confidentes assumunt audaciam cicius delinquendi maxime cum via[e] regia[e] locis quamplurimis spissitudine bosci velociter crescentis iam sunt indensate et obstruse quod vix aliquis est pedestris per eas poterit transire per quod cum Hybernici post maleficia sua revertentes ad boscum huiusmodi vel moram possint pertingere licet compatriote communiter vellent eos insequi et eos insequantur evadunt saepius sine dampno ubi si pateret accessus, ab eis qui eos insequantur forent deprehensi.*” BERRY, Henry F. (Org.), **Statutes and Ordinances and Acts of the Parliament of Ireland, vol.1: King John to Henry V.**, Dublin: HMSO, 1907, p. 208.

217 “*Et super hoc misit dominis Rex Justiciarius hic etc Transcriptum statute Wyntonis custodiende et observande In haec terra in ... simel cum voluntate domini Regi de tenore primi brevis hic*” PLEA ROLL, 1 AND 2 EDWARD II, M.76 F. *Ibid.*, p. 248.

218 “*Comaunde est ensement qe les hauz chemins des viles marchaundes, as autres viles [marchaundises] scient enlargiz, la ou il iad bois, ou haies, ou fossez, issi qil nient fosse, suthboys, ou bussuns, ou lem peut tapir pur mal fere pres del chemin, de deus centz pez de une part e de [deus centz*
68

less economically profitable a wood was, the better the sanctuary it would provide during military operations.²¹⁹ This explains the fact, noticed by Gibson, that every *trícha céit*²²⁰ in Thomond apparently kept undeveloped tracts of back-country within its limits.²²¹

The names and general location of these woods can be pieced together from the descriptions in the CT. Altogether, eleven places in Thomond are associated with woods: Brentir, Scool Hill, Cratloe, Ballymulcashel, Echtge, Siúdaine, Coill Druinge, Irrus, Fidhail, Fiadh Uachtarach, Coill an Áir and Forbar (Fig.3). Some of these locations survive in the present-day landscape – or did, until the relatively recent past. According to the CT, Coill Druinge was near “Fertane”, (An Feartán), now the townlands²²² of Fortane More and Fortane Beg in the parish of Tulla. Scool, Ballymulcashel and Cratloe too are townlands; the latter also the name of a wood that survives to this day. Echtge (or Slieve Aughty, from the Irish Sliabh Eghtaí, formerly Sliabh Echtge) is a well-known mountain range between Cos. Galway and Clare. Brentir is an obsolete name for the parish of Inagh– specifically, an area comprising seven townlands northeast of Slieve Callan, west of Ennis.²²³ Siúdaine, according to Edmund Hogan, was located in the parish of Drumcreehy.²²⁴ Fidhail, as well as a road of the same name (*Bealach an Fhiodhfáil*), is mentioned by the Annals of the Four Masters

*pars] de autre part, issi qe cet estatut point ne estende [as keyes, ne] as [gros] fusz, par qei ceo seit cler desuz. E si par defaute de Seign' qi ne vodra fosse, subois, ou bussuns, en la furme avautndite abatre, e roberies seient fetes, si repoygne le Seygn'”***The statutes of the realm: printed by command of His Majesty King George the Third, in pursuance of an address of the House of Commons of Great Britain; from original records and authentic manuscripts**, Searchable text ed. Burlington: TannerRitchie Publishing, 2007, p. 97, V.1. p.97

219 NICHOLLS, **Gaelic and Gaelicized Ireland in the Middle Ages**, p. 187.187

220 A large territorial division later related to the English *cantred*. The present-day baronies of Ireland were largely established other their boundaries. For a full account of its purposes, origins and similarities with other territorial divisions, Cf. MACCOTTER, Paul, **Medieval Ireland: Territorial, Political and Economic Divisions**, Dublin ; Portland, Or: Four Courts Press, 2008, p. 39–124.

221 GIBSON, **From Chieftom to State in Early Ireland**, Chapter 9: The World of the Caithréim Thoirdhealbhagh, Of Forests and Fortresses: the Political Geography of Thomond .

222 Townlands are small geographic divisions of Ireland. The island as a whole comprise c. 61000 townlands, 2267 of which are in Co. Clare.

223 FROST, James, **The History and Topography of the County of Clare, from the Earliest Times to the Beginning of the 18th Century**, Dublin: Sealy, Bryers & Walker, 1893. Available at http://www.clarelibrary.ie/eolas/coclare/history/frost/chap9_inagh_parish.htm (Access Date 29/05/2019); HOGAN, Edmund, **Onomasticon Goedelicum Locorum et Tribuum Hiberniae et Scotiae**, Dublin: Hodges Figgis & Co., 1910. Available at: <http://publish.ucc.ie/doi/locus/B> (Access Date: 29/05/2019).

224 HOGAN, **Onomasticon Goedelicum**. Available at <http://publish.ucc.ie/doi/locus/D#navtop> (Access Date: 29/05/2019).

near Kilkeedy²²⁵. John O'Donovan and Eugene Curry pinpointed its location at Rockforest, now a townland in Kilkeedy parish.²²⁶ Irrus is situated, according to Mac Craith himself, at the very edge of Corcabhaischin, “from famed Cuchullin’s Leap [Loop head] to Cnoc an Locha [Knockalough]”.²²⁷ Coill an Áir (“Wood of Slaughter”) is, as we shall see below, near Dubh Glen, southwest of Bealaclugga.²²⁸ Forbar, according to Westropp, could actually be the name of two different woods: one situated in Furrorr, a townland in the barony of the Islands, and another near the village of Feakle.²²⁹ Fiadh Uachtarach is our most elusive toponym. A review of Standish O’Grady’s edition of the CT at the time of its original publication suggested the townland of Carrahan in the parish of Clooney.²³⁰ Unfortunately, I have found no evidence to corroborate that claim.

225 “go t-tiugh a shloigh amaille fris d’urlar Choille f-Flannchadha, do Bhealach an Fhiodhfail go Cill Inghine Baoith i n-Uachtar Dalccais ria midhmedhon laoi..”1599.17 ANNALS OF THE FOUR MASTERS. 1599.17 O’DONOVAN, John (Org.), **Annala Rioghachta Eireann: Annals of the kingdom of Ireland by the Four Masters, from the earliest period to the year 1616**, Dublin: Hodges & Smith, 1848, p. 2098, 2100.

226 Writing in 1839, O’Donovan and Curry mention a townland called Kyleineal, an anglicization of *Coill an Fhiodhail* or “Fidhail’s wood”. However, I was not able to find any record of it.

227 “ó léim Con ciantesdaigh culaind co cnoc lerguaine lebartondach linmargrednach in locha.” O’GRADY (Org.), **Caithréim Thoirdealbhaigh**, p. 89.

228 “nachar fill riam tar a ais Caill indáir in duibgleann dearg” *Ibid.*, p. 21. For the location of Dubh Glen, see See section 2.4, “Routeways” below.

229 WESTROPP, Thomas Johnson, The Normans in Thomond. Part I., 1275-1287, **The Journal of the Royal Society of Antiquaries of Ireland**, v. 1, n. 4, p. 284–293, 1890, p. 289; WESTROPP, On the External Evidences Bearing on the Historic Character of the “Wars of Torlough,” by John, Son of Rory Mac Grath, p. 184.

230 Review of Caithréim Thoirdealbhaigh, **The Journal of the Royal Society of Antiquaries of Ireland**, v. 19, n. 2, p. 187–189, 1929, p. 189.

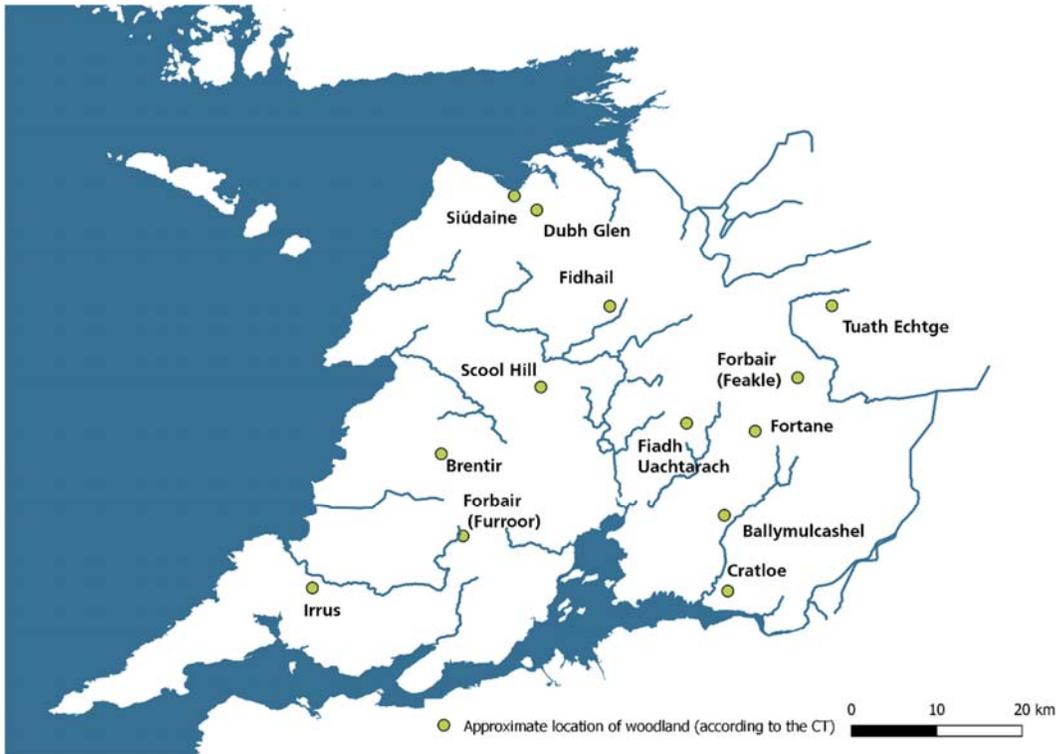


Figure 8: Approximate location of placenames associated with woods (according to the CT)

The map in Figure 8 provides a tentative outline of Thomond's woodlands according to the CT. To determine their actual extent, however, we must turn to different sources.

Ireland's woodlands were gradually – albeit dramatically – deforested following the submission of the last Gaelic chiefs to the Crown after the Battle of Kinsale in 1603. Clearances of woods for military purposes, large scale extraction of timber and fuel and an expansion of grazelands to feed an ever-increasing population brought upon an expressive reduction of the island's vegetation.²³¹ One estimation, that of Eileen MacCracken, suggests that Ireland's woodland cover went from 12,5% in 1600 to a mere 2% in 1800.²³² McCracken herself provided a reconstruction of the pre-17th century woodlands (Fig.9) but her chart is tentative and sadly opaque in relation to its sources.²³³ The map itself is ambiguous, representing some woods as a collection of dots and others as outlines, with little indication of how the notations are supposed to be interpreted.²³⁴

231 HALL, Valerie A., Pollen analytical investigations of the Irish landscape AD 200–1650, *Peritia*, v. 14, p. 342–371, 2000, p. 355–356.

232 MCCRACKEN, Eileen, **The Irish woods since Tudor times: distribution and exploration**, Newton Abbot: David and Charles, 1971.

233 MCCRACKEN, Eileen, The woodlands of Ireland circa 1600, *Irish Historical Studies*, v. 11, n. 44, p. 271–296, 1959.

234 As J.H. Andrews noticed, MacCracken also glossed over some of the earliest and most useful sources, such as John Browne's map of Connaught. NICHOLLS, Kenneth, Woodland cover in pre-modern Ireland, in: DUFFY, Patrick J.; EDWARDS, David; FITZPATRICK, Elizabeth (Orgs.), **Gaelic Ireland, c.1250-c.1650: Land, Lordship and Settlement**, Dublin: Four Courts Press, 2004, p. 189.

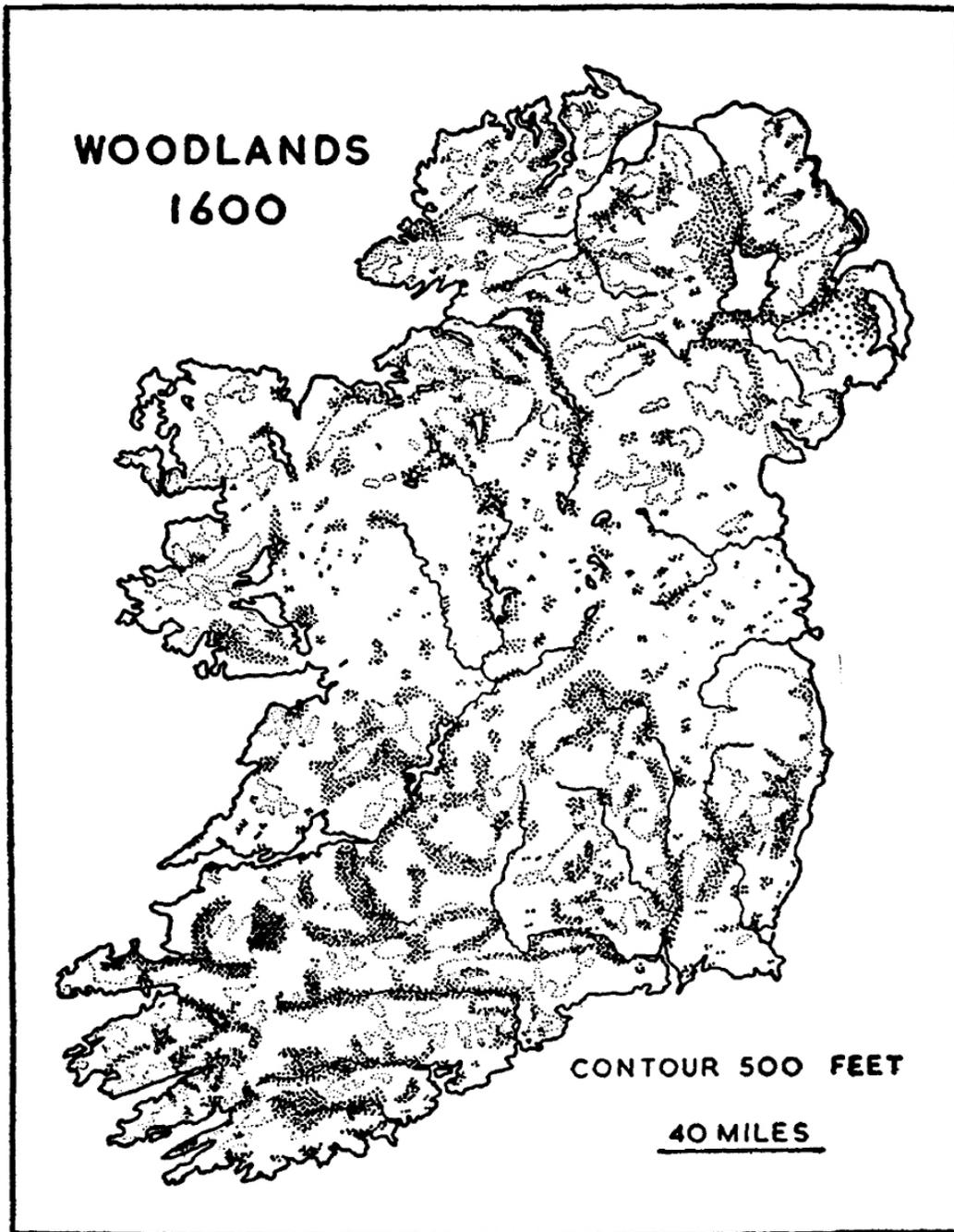


Figure 9: Reconstruction of the woodlands of Ireland c. 1600 by Eileen McCracken²³⁵

235 MCCRACKEN, The woodlands of Ireland circa 1600, p. 272.

There are no reliable cartographical sources for 13th and 14th centuries Ireland, and the colorful descriptions of woods found in the narrative sources are insufficient to accurately chart them. Fortunately, they are not the only sources we have at our disposal. In 1641, stirred by religious discrimination and grievances with the government and Protestant settlers, Irish Catholics in Ulster rose up in arms against the English rule. Aggravated by the confusion of the English Civil War (1642-1651), the rebellion became the spark of an all-out conflict known as the Irish Confederate Wars (1641-1653). The uprising was swiftly crushed after a four-year intervention by Cromwell's New Model Army which left most of the country in ruins. To further weaken the defeated rebels – as well as reward its disbanded soldiers – the English Parliament ordered the confiscation of lands and transplantation of Catholic landowners who had purportedly acted against the Commonwealth government. To that end, it commissioned a series of inquiries into the state of Ireland's lands: the Gross (1653), Civil (1654) and Down (1655-1658) Surveys of Ireland. Information from these records was compiled in the Books of Surveys and Distribution (BSD), an 18th century²³⁶ series of references to the survey maps. They were complemented with data from a previous survey known as the Strafford survey of Ireland, conducted in 1638 in preparation for a never undertaken plantation of Connacht.²³⁷ Detailing the nature and acreage of profitable tracts of land at the level of the townland, the BSD are a veritable snapshot of Ireland's 17th century rural landscape.

The information from these books is not entirely reliable, as its coverage of some counties is uneven.²³⁸ Furthermore, the Down Survey of Ireland paid a disproportionate attention to lands held by Catholics, with the result that many Protestant-owned territories were left unsurveyed.²³⁹ However, the BSD records for Co. Roscommon and Co. Clare, which draw from data from the previous Strafford Survey, are singularly thorough. Its “detailed breakdown of land qualities” Nicholls writes, “would allow a detailed map to be made not only of the actual location of woodland [...] but of its precise nature”.²⁴⁰

236 A note in one of the volumes suggests the date 1739. Cf. SIMINGTON, R. C., Introduction, *in: Books of Survey and Distribution, Being Abstracts of Various Surveys and Instruments of Title 1636-1703, Vol. 4 Clare*, Dublin: Irish Manuscripts Commission, 1967, p. vi.

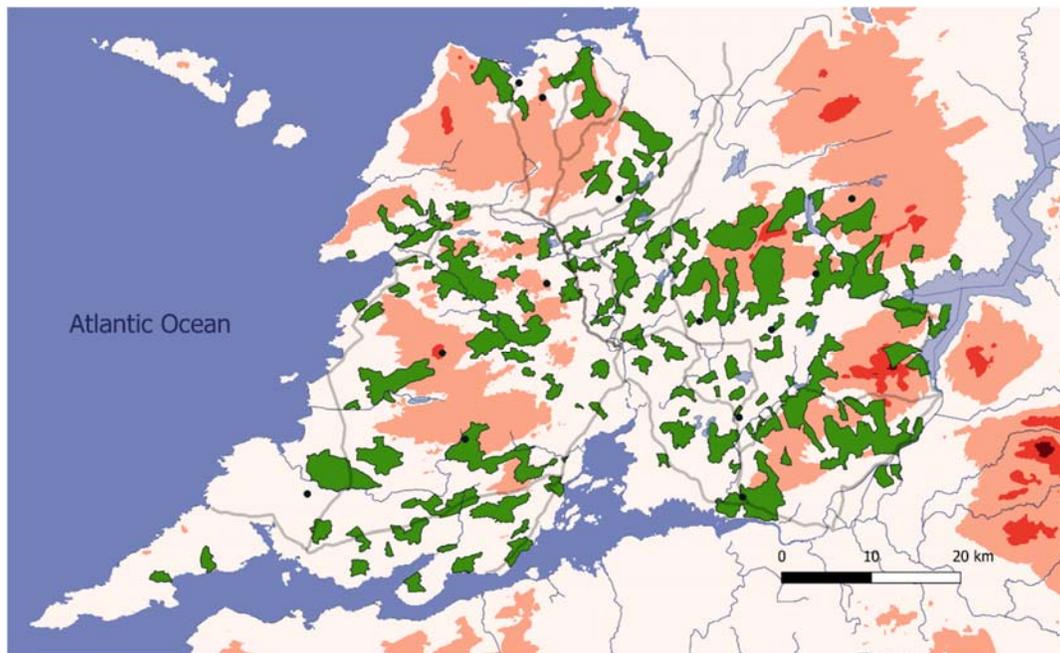
237 NICHOLLS, Woodland cover in pre-modern Ireland, p. 195.

238 *Ibid.*

239 *Ibid.*, p. 194.

240 *Ibid.*, p. 190.

Figure 10 is my attempt to bring the first half of this theoretical map to life. Based on the BSD's records for Co. Clare, it lists every townland in which the presence of wood is mentioned. Altogether, the wooded areas in the chart correspond to 328 townlands, although this list is not necessarily exhaustive. The place names catalogued the books are approximations of Irish toponyms written in an outdated English spelling. Not all of them can be easily matched to the names of present-day townlands, and some of them may well have disappeared as these boundaries were revised throughout the centuries. This map, therefore, is an unavoidably tentative, yet nevertheless detailed picture of Thomond's pre-industrial woodlands.



• Woodland mentioned by the CT ■ Townlands with woods

Figure 10: Woodlands in Thomond according to the Books of Survey and Distribution and the Inventory of Ancient and Long-Established Woodlands.

Although the BSD discriminate the acreage of each type of land, I have ignored that information and classified townlands as either wooded or not wooded. In reality, of course, we should not expect that any of these townlands were 100% covered by vegetation. I have also lumped together “profitable” woods fit for timber production with underdeveloped tracts of “underwood”, as well as designations such as “rocky wood” or “woody pasture”, which probably referred to woods in process of degradation.²⁴¹ Still, the resulting chart is more precise and easier to read than McCracken’s map and not altogether at odds with her reconstruction – not a surprising outcome given that she consulted the BSD herself. All major woods mentioned in Mac Craith’s narrative can be found in the chart, in some cases down to the very townlands suggested by the 19th and early 20th century scholars. Westropp’s two Forbars, Feakle and Furrorr, are both wooded; so is Magheranraheen or Rockforest, the presumed location of Fidhail. Carrahan is not, but the neighboring townlands of Maghera and Ballyvergin are. The parish of Inagh, home to the wood of Breintir, counts with several wooded townlands. Drumcreehy, the location of Siúdaine, is also heavily wooded. Fortane itself is not wooded, but, just as in the case of Carrahan, the neighbouring townlands of Lisduff and Liscullaun are. The Echtge mountains are abundantly tree-covered; Irrus, less so, but still endowed with enough pockets of vegetation to have provided shelter to fleeting armies.

It is to be expected that the woods mentioned in the BSD would also feature in the catalogue of ancient and long established woodlands, a list of woods with a continuous history of cover since the 17th century.²⁴² Surprisingly, the match is not exact, although most of the outliers appear at the borders of townlands listed as wooded by the 17th century surveyors. It is possible that this discrepancy is a result of townlands shifting boundaries with the passing of time. To err in the side of caution, I have included in the map the locations of ancient woodlands not contemplated by the data from the BSD – also at the level of townlands, to respect the same standard of generalization.

An important caveat needs to be made. While all of these locations may have contained pockets of vegetation thick enough to hinder armies, woods were not obstructions per se. Tall, well-spaced timber trees were easier to traverse than degraded or shrubby woods, which

²⁴¹ *Ibid.*, p. 193.

²⁴² PERRIN, Philip M.; DALY, Orla H., **A Provisional Inventory of ancient and long-established woodland in Ireland**, Dublin: National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, 2010.

reduced visibility and prevented cavalry from operating. This different is carefully spelled out in the 1285 Statutes of Winchester, which order that “ditches, underwood [and] bushes” (*fosse, suthboys, oubussuns*) be cleared, but oaks and “great woods” (*gros fusz*) be left alone.²⁴³ More importantly, however, woods seem to have excelled as havens and ambush sites due to their proximity to bogs. This is suggested by the ordinances of a general parliament in Ireland in 1297, which attributes the Irish’s mischiefs not merely on the “density of the woods” (*densitate boscorum*) but also on the “depth of the neighboring mires” (*profunditate morarum adjacensium*).²⁴⁴ While the wording of the document suggests and equivalence, it may well be that these mires were much deeper – and extensive – than anticipated at first sight.

2.3. Peat bogs and other marshes

Peat, or turf is an accumulation of biogenic matter that took place in the post-glacial period.²⁴⁵ Similar to mud in appearance, but technically a soft kind of coal, peat can be found in mires several meters deep and many kilometers wide, constituting formidable obstacles to land-based movement. There are many types of bog mires, and many ways to classify them. As far as their impact on the landscape is concerned, they are often divided into raised and blanket bogs. Raised bogs are deeper (up to 10m deep in their natural state)²⁴⁶ and accumulate in places of difficult drainage, such as former lakes and depressions.²⁴⁷ Blanket bogs are

243 “Comaunde est ensemment qe les hauz chemins des viles marchaundes, as autres viles [marchaundises] scient enlargiz, la ou il iad bois, ou haies, ou fossez, issi qil nieit fosse, suthboys, ou bussuns, ou lem peut tapir pur mal fere pres del chemin, de deus centz pez de une part e de [deus centz pars] de autre part, issi qe cet estatut point ne estende [as keyes, ne] as [gros] fusz, par qei ceo seit cler desuz. E si par defaute de Seign’ qi ne vodra fosse, subois, ou bussuns, en la furme avaunt dite abatre, e roberies seient fetes, si repoygne le Seygn’” **The statutes of the realm**, p. 97, V.1. p.97

244 “Hibernici eciam de densitate boscorum et profunditate morarum adjacensium confidentes assumunt audaciam cicius delinquendi maxime cum via[e] regia[e] locis quamplurimis spissitudine bosci velociter crescentis iam sunt indensate et obtruse quod vix aliquis est pedestris per eas poterit transire per quod cum Hybernici post maleficia sua revertentes ad boscum huiusmodi vel moram possint pertingere licet compatriote communiter vellent eos insequi et eos insequantur evadunt saepius sine dampno ubi si pateret accessus, ab eis qui eos insequantur forent deprehensi.” BERRY (Org.), **Statutes and Ordinances and Acts of the Parliament of Ireland, vol.1: King John to Henry V.**, p. 208. Underlined letters are my own transcription.

245 HAMMOND, R.F. **The Peatlands of Ireland**. Dublin: An Foras Talúntais, 1981, p. 7

246 FINCH, T.F. **Soils of County Clare**. Dublin: An Foras Talúntais, 1971, p. 44

247 IRISH PEATLAND CONSERVATION COUNCIL. **A to Z Peatlands: Raised Bogs**. Available at: <<http://www.ipcc.ie/a-to-z-peatlands/raised-bogs/>> (Access date: 20/08/2019)

shallower (up to 2m deep) and accumulate due to high humidity and rainfall.²⁴⁸ Neither type is entirely impassible. Both can be traversed with the aid of ready-made plank pathways known as toghers (from the Irish word *tóchar* meaning “causeway” or “passage”), variants of which are still used to this day (Figure 11).



Figure 11: Modern togher over bog in Glendalough, Co. Wicklow. Photo by the author. (2019)

Even with the help of toghers, bogs were always a menace to large parties, especially if they were encumbered by oxen, facing adverse weather or scattered after a route. The Annals of Clonmacnoise give a chilling example of the danger they posed in the passage for the year 1315, in which the army of Feidhlim Ó Conchobhair, the king of Connacht, becomes a sitting duck during a raid, as

²⁴⁸ FINCH, T.F. *Soils of County Clare*. Dublin: An Foras Talúntais, 1971, p. 46

They could not drive the prey by reason the great moysture of the bog because the feet of the Cattle waded soe deep in the meere, and also being pursued by a great company in soe much that all the forces of the sons of Cahall and that parts did overtake him.²⁴⁹

Just like its woodlands, Ireland's bogs have been extensively destroyed throughout the centuries, either for the extraction of peat as a source of fuel or for reclamation of land for agriculture. Fortunately, we do not have to rely on the surviving mires to estimate the probable extent of Pre-Industrial bogs. The Irish Soil Information System, co-funded by Teagasc and the Environment Protection Agency (EPA), provides a listing not only of undisturbed bogs, but also of peat soils that have been drained, cutover or industrially harvested.²⁵⁰ The database shows a dense concentration of mires in both the East and West of the kingdom, covering large parts of the medieval territories of Tuath Echtge, Trícha Céd Uí mBlóid and almost the entirety of the subkingdoms of Corcabhaiscinn and Uí Bhréacain. (Figure 15).

249 ANNALS OF CLONMACNOISE. MAGEOGHAGAN, C. (Trad.), MURPHY, D. (Ed.) **The Annals of Clonmacnoise, being Annals of Ireland from The Earliest Period to A.D. 1408.** Dublin: Llanerch Publishers, 1993 (Facsimile of 1896 edition), p.273

250 TEAGASC,EPA,CRANFIELD UNIVERSITY. **Irish Soil information System.** Available at: <<http://gis.teagasc.ie/soils/>> (Access Date: 20/08/2019)

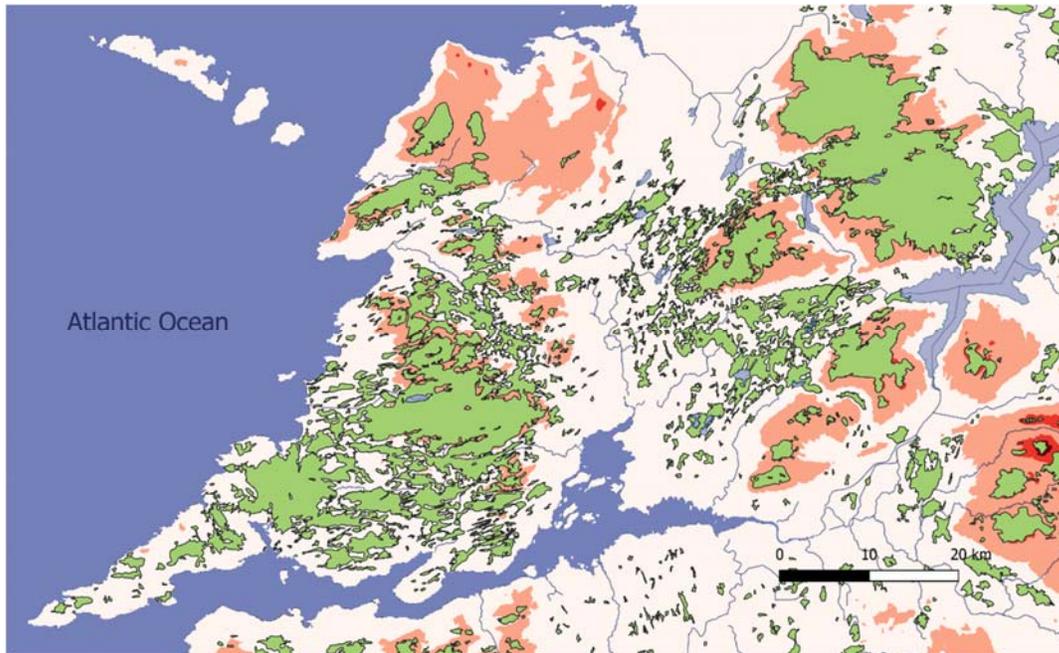


Figure 12: Peatlands in Co. Clare and environs according to the Irish Soil Information System.

The BSD also discriminate an additional type of marshland, called curragh (from the Irish *corrach* meaning “bog” or marsh’.) Mentions of this type of soil occur seldom in the surveys of Co. Clare, but they are specially prevalent in a region that is not otherwise associated with peat deposits: the mouth of the Fergus by the Shannon estuary. (Fig. 13) It is possible that these curraghs were tidal marshes, a type of wet terrain that is still prevalent in the region, and might have been even more extensive in the pre-industrial period due to later land reclamation. These marshes may have played an important role during the wars of 1276-1318, being as they are located around the Uí Bhriain *ceann áit* at Clonroad, and possibly acting like a natural layer of defense.

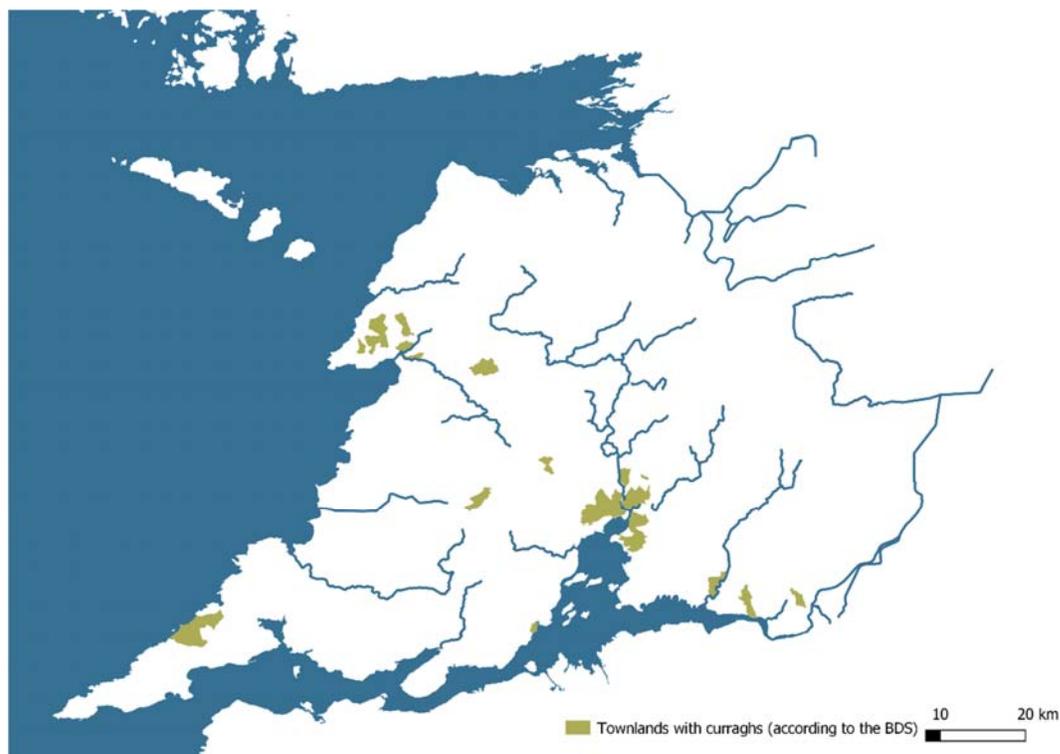


Figure 13: Townlands containing curraghs in Thomond according to the BDS

2.4. Routeways

As a coastal kingdom situated next to the estuary of one of Ireland’s major rivers, one would expect Thomond to rely a great deal on water transportation. While this was certainly true for purposes like long-distant trips, commerce and fishing, there is a remarkable lack of mention of water-borne operations in sources about the wars of 1276-1318. The CT alludes to the use of “broad cots” (*lathanchoitedha*) piloted by “steermen” (*luaimairedha*) to cross the

Shannon into the neighboring province of Tipperary²⁵¹, and its account of the siege of Bunratty castle in 1305 implies the fortress was supplied via boats.²⁵² Within Thomond, however, most military movement was predominantly terrestrial.

This peculiarity becomes less surprising if we keep in mind that Thomond was a relatively small territory, comprising an area of less than 4000 km². The very edge of Cúchullain's Leap (present-day Loop Head peninsula) and Béal Bóruimhe, mentioned in the CT as the fringes of the kingdom, are situated *circa* 105 km apart in a "crow flight" estimate – i.e. in a straight line from one another. Clonroad and Bunratty, the Uí Bhriain *ceann áit* and the English capital, respectively, are merely 20 km apart from one another. Within such short distances, it is simpler to move armies via land than to deal with the logistics of fluvial or maritime transportation of large parties of soldiers. To that end, the prevalence of large stretches of woodland and mires in Thomond made reliable routeways a necessity.

Studies of roads and routes in pre-modern Ireland are, sadly, few and far between. The seminal investigation on the topic was conducted by Colm O Lochlainn in his groundbreaking article *Roadways in Ancient Ireland* in 1940. "These notes" he wrote "will serve as a guide to a branch of study which affords scope for many workers".²⁵³ By comparing the descriptions of travels in sagas and lives of saints with toponyms related to pathways – such as *Ath* (ford), *Bealach* (pass), *Bóthar* (cattle track) and *Coradh* (weir), O Lochlainn compiled the first tentative map of the communication network of Early Medieval Ireland. (Fig. 14) Unfortunately, his call to action was not heeded by a great number of historians, and the identification of Irish roads remains, as it was in 1940, "a field so wide that nothing like finality could be hoped for even if one had no other care in life".²⁵⁴

251 "agus do léigetar na luaimairedha a lethanchoitiedha re sruth trésan saobegla ag faicsin na cinedach ar na caladhbruachaib ag comthuitim" O'GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 75. (Author's translation)

252 "Is do'n dula sin do órdaig Toirdelbach in triathobair nár hórdaiged i nEirinn [a] hintsamail roime riam .i. clárdroiched ciumasréid fiarláid na gaible mara gusin tráig: agus ro ba chorrtha in caislén ó na cóirigib sin" *Ibid.*, p. 29.

253 O LOCHLAINN, Colm, *Roadways in Ancient Ireland*, in: RYAN, John (Org.), **Féil-sgríbhinn Eóin Mhic Néill: Essays and studies presented to professor Eoin MacNeill on the occasion of his seventieth birthday, May 15th 1938**, Dublin: Three Candles, 1940, p. 465.

254 *Ibid.*

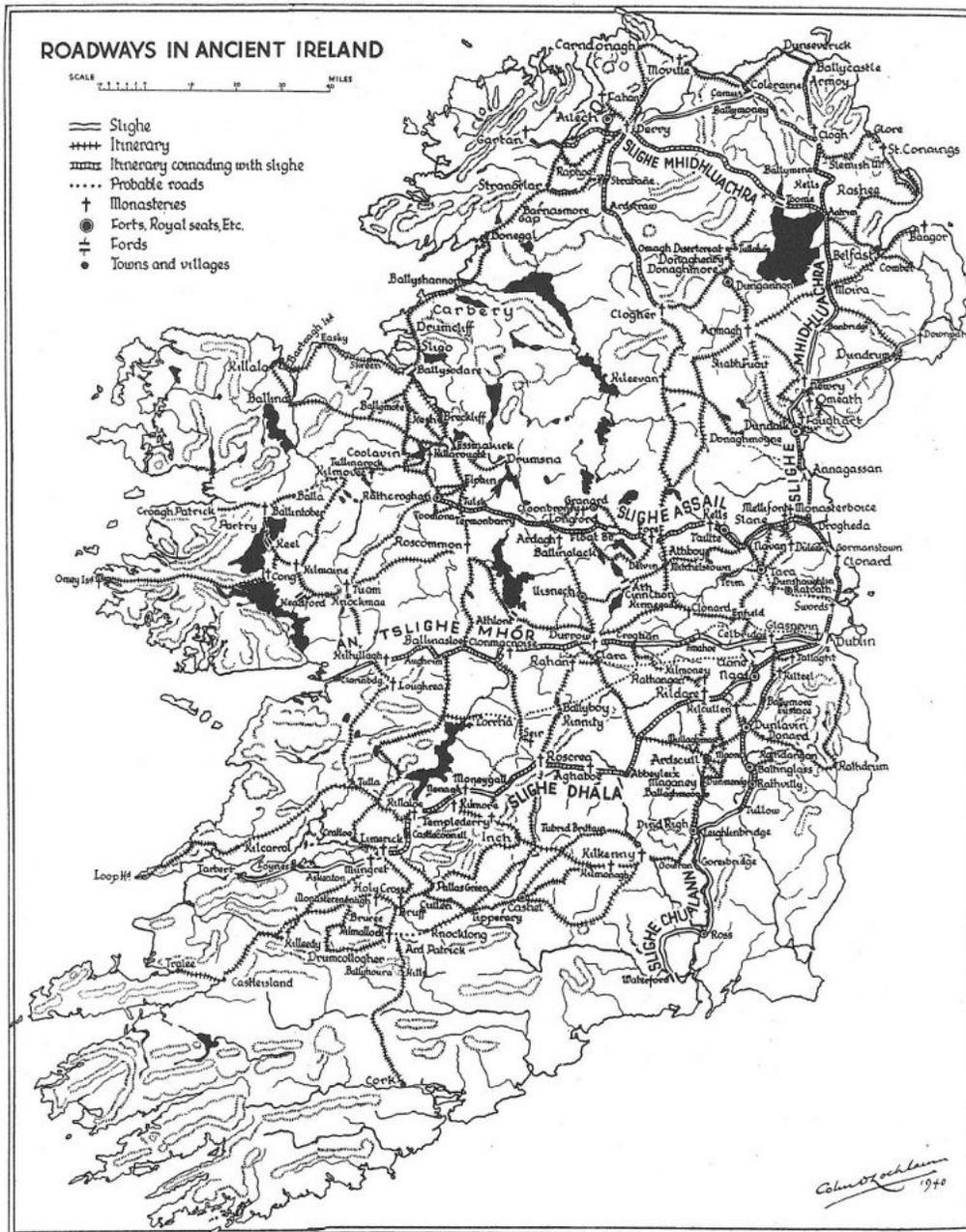


Figure 14: Routeways in Ancient Ireland according to O Lochlainn

O Lochlainn's reconstruction was not meant to be comprehensive. Among its many shortcomings, it does not stretch past the Early Middle Ages, where most of the routeways utilized between 1276-1318 arguably did not yet exist. Indeed, his map depicts no roads at all in what would become late-medieval Thomond, although it helpfully traces the itineraries mentioned in the sources he consulted. One of the few studies to have light on the routeways of medieval Thomond, albeit within a national framework, is Peter O'Keeffe's *Ireland's Principal Roads 123 AD - 1608*.²⁵⁵ By comparing seventeenth century and eighteenth-century general maps of Ireland with annalistic descriptions of itineraries, he put forth a hypothesis for the probable dates in which each segment first appeared in the landscape. O'Keeffe, however, did not match his findings to the CT, a document whose level of topographical detail far exceeds that of the Irish annals. Moreover, he largely neglected archaeological surveys and excavations, which have identified both direct and indirect evidence of medieval routeways. In the following pages, I will adapt O'Keeffe's methodology to 13th and early 14th century Thomond, reinterpreting (and complementing) the later maps in light of this trove of evidence.

The Thomond routeway network and the CT

The CT provides detailed itineraries of some of the military campaigns that comprise its narrative. To use them as evidence for actual routes naturally carries a great deal of danger. This prose tract was likely composed *circa* 1350 under the sponsorship of king Diarmait Ó Briain [15], a member of Clann Taidhg.²⁵⁶ It boasts an overtly laudatory tone towards its patrons, as is not above rewriting history – or intertwining it with myth – to suit its agenda. While the existence of the overwhelming majority of the events, characters and places it mentions can be corroborated by external sources²⁵⁷, it occasionally indulges in certain flights of fancy, like suggesting that Clann Taidhg ruled uncontested after 1318 – in fact, both

255 O'KEEFFE, Peter J., *Ireland's Principal Roads, 123 AD to 1608*, Dublin: National Roads Authority, 2001.

256 For a recent examination of the CT's context of production, Cf. WESTROPP, On the External Evidences Bearing on the Historic Character of the "Wars of Torlough," by John, Son of Rory Mac Grath; MCINERNEY, Luke, Was Caithréim Thoirdealbhaigh written at Clare Abbey in the mid-fourteenth century?, *The Other Clare*, v. 45, p. 26–32, 2021.

257 WESTROPP, Thomas Johnson. On the External Evidences Bearing on the Historic Character of the "Wars of Torlough," by John, Son of Rory Mac Grath. *The Transactions of the Royal Irish Academy*, v. 32, p. 133–198, 1902. Available at: <<https://www.jstor.org/stable/30078832>>. Access date: 29 May 2019.

the English and Clann Brian Ruaidh would remain active in the following decades²⁵⁸ – or describing meetings between its characters and mythological entities like the embodiment of Ireland’s sovereignty and the Badb, Irish goddess of war and prophecy.²⁵⁹ It should not, therefore, be read as an annal or chronicle, but rather as a work of epic fiction produced under of sponsorship of one of its protagonists. It is plausible that some of these marches never actually happened – which does not mean, of course, that places mentioned in their descriptions were not connected by actual routeways. To thread the often murky divide between fact and fiction, I will do my best to corroborate my reading of the CT with parallel evidence from other narrative or archaeological sources.

Mac Craith dedicates nearly a third of his opus to two Clann Taidhg victories: the campaigns leading to the battles of Corcomroe Abbey in 1317 and Dysert O’Dea in 1318. As far as mentions of itineraries are concerned, the episodes are exceptional in their level of detail. The description of the 1317 campaign, for example, gives us Clann Thaidhg forces mustering in Ruan, then proceeding into upper Clann Chúillen, crossing the river Ferguns at Aughrim-Kelly (*Caraidh Ech[d]roma*), passing through Tullyodea (*thulaigh [...] í Deadhaid*), the inauguration mound of the Uí Dheadhaigh of Cenél Fermaic, and finally crossing the river again at Macaburren’s causeway (*Caraidh Mic Amboirend*), which Westropp and Gibson surmise to be Kells bridge, between Loughs Cullaun and Atedaun.²⁶⁰ The itinerary is confusing, as the party starts the march headed eastwards, in the opposite direction of their destination, Clann Brian Ruaidh’s *longport* near Dubh Glen. It is possible that either Mac Craith or one of his sources was more concerned with mentioning these places than with presenting a credible itinerary, although we cannot know for sure. The second part of his march is thankfully easier to follow, as we are rewarded with a rare example of a medieval

258 Cf. NIC GHIOLLAMHAITH, Aoife. Dynastic warfare and historical writing in North Munster, 1276-1350. *Cambrian Medieval Celtic Studies*, v. 2, p. 73–89, 1981, p. 76

259 “adubairt in badb: is mise in dobarbrónach, agus is minic chomnaigim i sídib in tíre so; agus is do tuaith iffirnd dam do bunad, agus is do bar gcuiredsa tánac, óir is gerr gomad aondúthaig dúinn. Is ann sin ro fiarfaig in Clárach: créd toisc na haimide úd. atá, ar a fer comagailme, go dobrónach geránach guthainmín ag dénam míchelmaine is drochfáistine dúinne do’n turas so; agus is dóchaide dúinn gach sonas do beith inár gcomlenmain a tecmáil orrainn, ar sé, óir aithnigmid gurab ar maithe le cloinn Toirdelb aig táinic sí do tairmíosc na tosca so orrainn.” O’GRADY (Org.), *Caithréim Thoirdhealbhaigh*, p. 142.

260 “agus is í so slighidh ar sheoladar || na sluaigh sin lesin bfuachadh fraechaindiuid forniata fichinnsaighthech feirgi sin: ó ma[i]gh na poll puballglan, agus do bernaidh craebtorthigh í Chaillín, agus do lecht laomscarraidhech ingine í Lochlainn leabartesdaigh, agus í claind Cuilén uachtaraigh co hindeldirech, agus í caraidh ech[d]roma co haithcobsaidh éstechtchiuin, agus lá[i]m clé re caomthulaigh ndrúchtbraonglais ndathlergmao[i]th ndegthesdaigh í Deadhaid, agus tar bruachaib bánstothacha Besgnatan, agus a caraidh mic amboirend mbéichumgi bórdsléimne.” O’GRADY (Org.), *Caithréim Thoirdhealbhaigh*, p. 98. WESTROPP, On the External Evidences Bearing on the Historic Character of the “Wars of Torlough,” by John, Son of Rory Mac Grath, p. 153. GIBSON, *From Chieftdom to State in Early Ireland*, p. 64.

highway mentioned by name. According to the CT, the army took the *Bothar na Mic Rígh* (“Road of the King’s Son”), passing through Mullach Gaoil (townland of Bunnanagat South), Leana, the monastery of Kilmacodonnán, Crughwill and Dubh Glen (Kilweelran) on their way to meet Clann Briain Ruaidh’s army.²⁶¹

The Irish word *Mullach* stands for summit, although the name Mullach Gaoil is no longer used to refer to any mountain in Ireland. Writing in 1897, George U. MacNamara described it as a “rough limestone hill in the townland of Bunnagat [Bunnanagat] South, north of the old church of Kilnaboy.”²⁶² “White-stoned” limestone hills indeed abound in the region, and there is little doubt that Mullach Gaoil was one of them. The monastery of Kilmacodonnán or Cill-mic-i-Donain has long been abandoned, but its ruins were identified almost by hazard by MacNamara himself in the townland of Leana, mentioned by name in the text.²⁶³ James Frost, suggested Dubh Glen (“black valley”) could be Glennamanagh, an obsolete name for a valley in the townland of Kilweelran found in the 6-inches maps made by the Ordnance Survey of Ireland between 1829 and 1841.²⁶⁴ This is a secluded basin surrounded by mountains east and west, very close, as the BSD show, to the woods of Siúdaine near the coast. As such, it is a likely location for the “wood of slaughter”, the famous ambush point the proximity to which made Mac Craith describe the valley as “Red Dubh Glen”.²⁶⁵

Plotting these locations on a map, we can see that they broadly follow a line along the present-day L1014 and R476 roads between Corofin and Corcomroe Abbey. (Fig.15)

261 “*agus i mullach ghaoil glasbánclochaigh, agus do na linánaib lachtmaothféraigh, agus do cill mic í Dondáin dochtglicbriathraigh docaircráibdigh, agus trí certlár Crich||maille gu céimfoisdinech, agus tré daingenlargaib Duibglenna*” p. 99

262 MACNAMARA, George U., Identification of “The Ascetic’s Church,” Leana, Co. Clare, **The Journal of the Royal Society of Antiquaries of Ireland**, v. 7, n. 1, p. 77–79, 1897, p. 77, nota 3.

263 MACNAMARA, Identification of “The Ascetic’s Church,” Leana, Co. Clare.

264 FROST, **The History and Topography of the County of Clare**. Available at <http://www.clarelibrary.ie/eolas/coclare/history/frost/chap12_murrogh_obrien.htm> (Access Date 04/06/2019). Glennamanagh (from the Irish *Gleann na Manach*, “Valley of the Monks”) was listed as a territory in sources as late as the 16th century. Cf. GIBSON, **From Chieftom to State in Early Ireland**, p. 158–159.

265 “*nachar fill riam tar a ais Caill indáir in duibgleann dearg*”. O’GRADY (Org.), **Caithréim Thoirdhealbháigh**, p. 21.

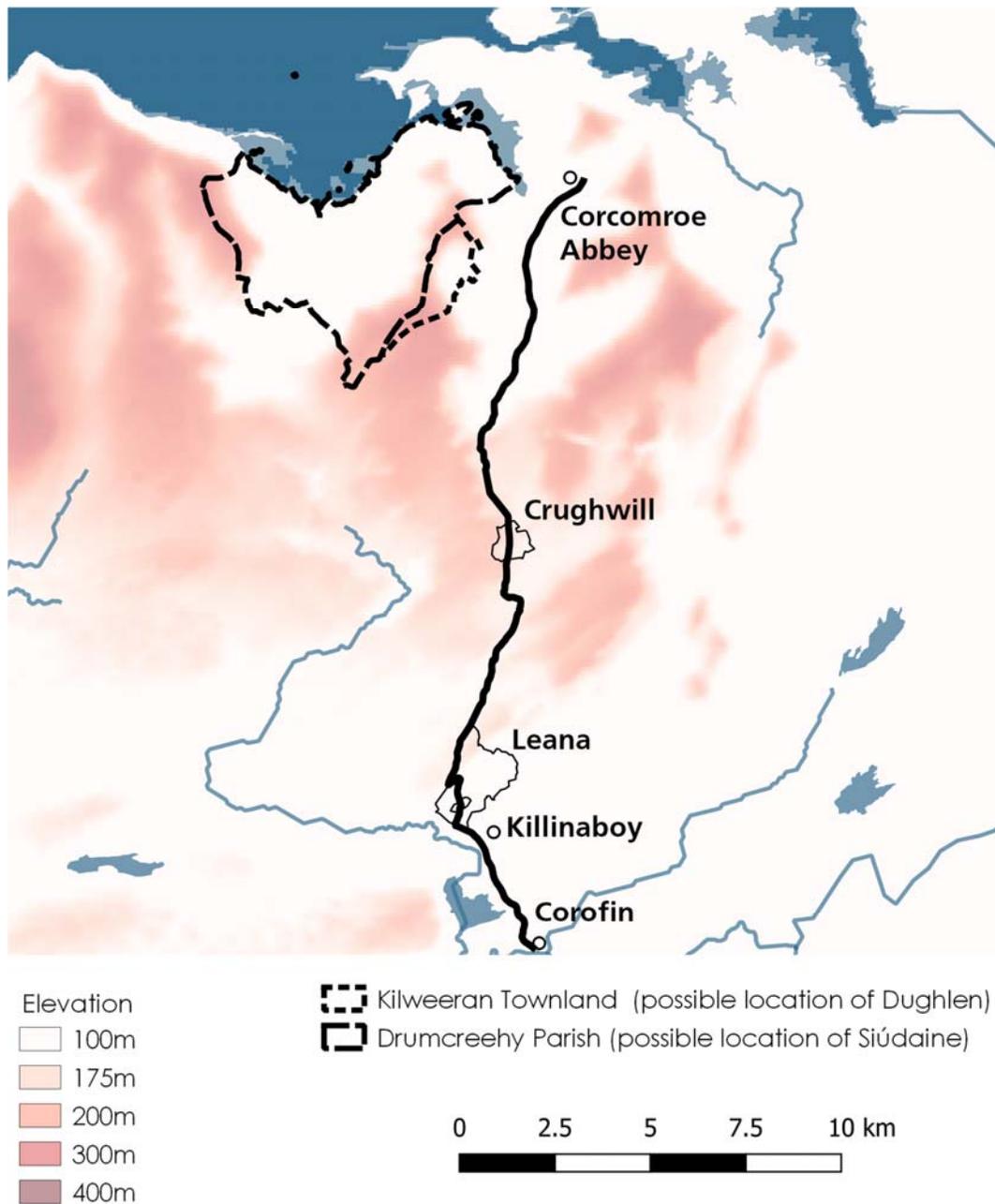


Figure 15: Itinerary of Maccon Mac Conmara's 1317 expedition approximated to the current road grid.

The last segment of this road follows a natural pathway between the Burren mountains, suggesting it was used as a corridor between Cos. Clare and Galway for as long as these regions might have been occupied. The fact that such an obvious route is missing in Petty's map suggests that other roads of equal or lesser importance might likewise have been omitted. The highway does appear in a later chart, Henry Pratt's 1708 general map of Ireland, although it veers towards the monastery of Kilfenora – and the Uí Conchobhair *ceann áit* at Caherballykinvarga – rather than following north to Corcomroe Abbey.²⁶⁶ It is possible that by the early 18th century the Kilnaboy – Corcomroe Abbey routeway was not deemed important enough to be included in general maps of Ireland. This comes as no surprise, as this route was considered challenging even for 14th century standards. As the CT describes it, the army advanced through “rough pathways, narrow gaps, rugged boulders and high crests”.²⁶⁷

Michelle Comber pointed out the existence of natural roadways connecting prominent Early Medieval sites, some of which are precursors to contemporary highways.²⁶⁸ The “uncouth ways” taken by Maccon's army in 1317 might have been one of them, but most definitely not the only one. Comber and Hull have argued that the contemporary R480 road between Leamaneh to Ballyvaughan might also have a medieval precursor.²⁶⁹ The routeway is easily assessable to a number of important sites associated with the Uí Lochlainn chiefs of Boireann, including Nougheval monastery, Caherconnell (seat of an important member of the clan), Kilcorney (a church sponsored by Caherconnell's resident)²⁷⁰ and their later capital at Gregans tower house.²⁷¹ Olive Carey believes another modern road, from Carran to Cappaghmore, “must always have been an important conduit”, as it follows the easiest path from the Burren to Galway Bay past the rugged slopes of Gortaclare mountain, Doomore hill

266 PRATT, Henry, *Tabula Hiberniae Novissima et Emendatissima. A Mapp of the Kingdom of Ireland*. Dublin, 1708

267 “*agus do gabadar rompo fá'n samail sin i críchaib cloch faobracha carragmóra carcardaingne cnocaimréidhe cumang dlúithe críchi Cuirc, agus tré borbslightib bernchunga belachcama boirendgarba bendáird || géra Bóirne, agus a mbél bóthair na mac rígh.*” SÉAN MAC RUAIDHRÍ MAC CRAITH, *Caithréim Thoirdealbhaigh*, p. 132.

268 COMBER, Michelle, Central Places in a Rural Archaeological Landscape, *Journal of the North Atlantic*, v. 2018, n. 36, p. 1–12, 2018, p. 4.

269 COMBER, Michelle; HULL, Graham, Excavations at Caherconnell Cashel, the Burren, Co. Clare: implications for cashel chronology and Gaelic settlement, *Proceedings of the Royal Irish Academy. Section C: Archaeology, Celtic Studies, History, Linguistics, Literature*, v. 110C, p. 133–171, 2010, p. 134.

270 *Ibid.*, p. 136.

271 FITZPATRICK, Elizabeth, Denomination Boundaries and Settlement Changes in Cahermacnaghten, in: *Burren Landscape and Settlement, An INSTAR PROJECT.*, [s.l.]: Heritage Council, 2008, p. 134.

and Slieve Carran.²⁷² A number of pre-historical archaeological sites have been found alongside the route, suggesting it might have been used even before the medieval period. The CT provides evidence to corroborate this claim. Carran is situated near Cruchwill, which was, as we have just seen, connected to the *Bothar na Mic Riogh*. Slieve Carran itself was the location of a *longport* in which Donnchad Mac Toirdhealbhach Mór [13] camped during a campaign – imprudently so, perhaps, given that he was killed there by his own men. The description of the murder, while brimming with supernatural elements, further corroborates the location. According to the text, the Irish leader was lured out of the encampment by wails of three shadows, and became entranced by the lights coming from nearby *sídhe*.²⁷³ Also known traditionally as “fairy forts” in English, *sídhe* are prehistorical sites such as cairns or *tumuli* believed to be associated with pre-Christian deities. Carey’s survey brought up 18 exact and probable matches for cairns in the the Coolnatullagh valley next to the Carran – Cappaghmore road.²⁷⁴ There is little reason to doubt that this is the same routeway in which the chief met his end.

272 CAREY, Olive, Coolnatullagh – A Final Neolithic/Early Bronze Age secular and ritual landscape in the eastern Burren, in: **Burren Landscape and Settlement, An INSTAR PROJECT.**, [s.l.]: Heritage Council, 2008, p. 61.

273 “ro an in táirdrí in oidce sin ar sliab chairn na foraire ina chomnaide. agus do bátar airdenna nemgnáthacha ag uaislib ina nárdlongport isin oidce sin, go nár léigedh suan do na sluagaib le siabarthaidbred na saobaislingedh; gur ba léir solas gacha sida tréna solaslabrachaib agá soillsiugad. do choméirgetar na ceithre tonna go dtugatar a dtromosnada ós árd go tinnésnach i nénéfecht ar éntsligid, go ro líon árdmacalla na nosnad sin i gcailltib agus i gclochaibnib na caomFódla; agus atchualatar cách go coitchenn trí fásadhfa fáidhanbfanna féthmairgnecha follaschiuine fionnáibne sin oidce chédna gan chunntabairt” SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhagh**, p. 47.

274 CAREY, Coolnatullagh – A Final Neolithic/Early Bronze Age secular and ritual landscape in the eastern Burren, p. 55.

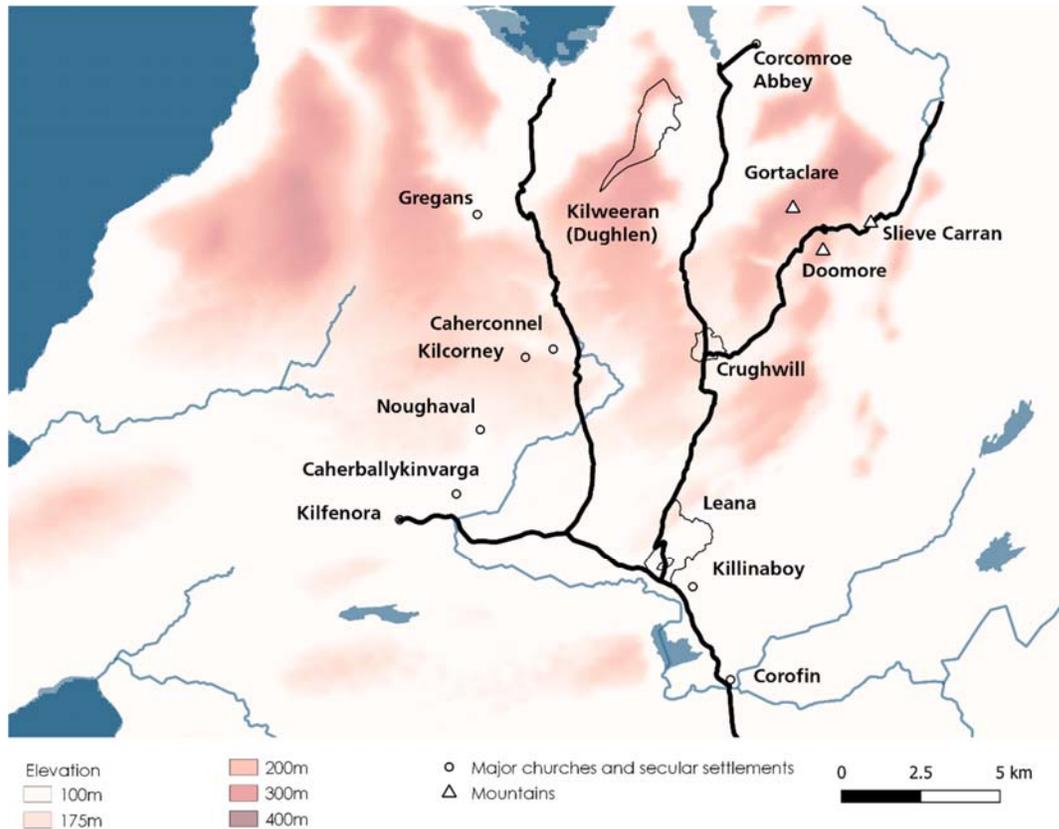


Figure 16: Pre-industrial routeways in the Burren, Northwestern Clare, approximated to the current road grid

Two passages from the Annals of the Four Masters from the time of the Nine Years War (1593-1603) suggest the existence of yet another road in the region. In 1599, we are told that Hugh Roe O'Donnell, one of the leaders of the Irish rebellion, invaded Thomond from the north. He pitched camp in a place called Ruaidh-Bheitheach, between Kilcolgan and Ardrahan, and split his armies into several marauding parties, one of which reached Killinaboy via Fidhail's pass (*Bealach-an-Fhiodhfail*).²⁷⁵ The very same road was also taken

²⁷⁵ "Dala Uí Domhnaill co na shloghaibh ro ascenáttar do dhol i t-Tuadmumhain & ní ro h-airiseadh leo go rangatar gan ráthucchadh go m-bátar don taebh istigh d'abainn h-i c-Cloinn Riocaird. Ro gabhadh longport lethan laocharmach leo im tráth nóna do ló ar an Ruaidh Bheithigh etir Chill Colgan & Ard Raithin. Bátar hi-suidhe ag cinnedh a c-comhairle dus cionnus nó fhoiberdais an c-crích n-ainiúil gus a t-tudhcatar, & go ro chaithset ní dia lóintibh, & go ro thuilsiot a suan toirrchim ria n-dol h-i c-cenn mhórastair, & mhórshaothair doibh cenmotát an lucht friothaire báttar leó. Bádar samhlaidh go medhon oidhce. Ro forchongradh forra iaramh la h-Ua n-Domhnailléirghe gan fhuirech d'ascnámh isin c-cóiccrích ria siú ro

by Sir Conyers Clifford, the English governor of Connaught, who invaded Thomond afterwards to pacify the Irish. He departed from Galway and rested at Kilkeedy before marching through Fidhail, where, after withstanding an ambush attempt, he, too, proceeded to Killinaboy.²⁷⁶ The woods of Fidhail are mentioned in the CT as the spearhead of Muirchertach mac Toirdhealbhagh Mór [14]’s attempt to regain control of Thomond in 1311.²⁷⁷ He was followed by William de Burgh, a longstanding ally of Clann Taidhg, who came with troops to oust his dynastic rival, Diarmaid mac Donnchad mac Brian Ruadh [16], and set him up as king instead. It makes perfect sense that Muirchertach and William would take the very same road mentioned in the annals, as the de Burgh were earls of Connacht and, like O’Donnell and Clifford, would have invaded Thomond from the north. The fact that the highway merged with the *Bothair na Mic Riogh* at Killinaboy meant that parties coming through Fidhail could easily pour through the heart of Thomond.

badh solus lá doibh. Atraighsiot iaramh fo céadóir. Lottar rempa iaramh í reidh dhíorgha gacha róid gach n-dírech go rangattar a moichdedoil na maidne isin c-cenn thoir do Choill f-Flannchadha, do triocha céd Ceneoil f-Fermaic i t-Tuadhmunhain. Ro rannsat a sceimhelta an dú sin. Ro leiccitt drong diobh don taobh budh tuaidh istech i m-Boirinn im Tadhg Ua Ruairc, & im Mac Suibhne m-Baghaineach, & drong ele ther isteach go Baile Uí Occáin na coilleadh moire, go Tulaigh Uí Dheadhaidh, go dorus Bhaile Uí Ghriobhta. Do-dheachaidh Mag Uidhir go n-druing moir do slogh amaille fris [co h-Inis Uí Chuinn]. Do-taéd tra Ua Domhnaill go t-tothacht & go t-tiugh a shloigh amaille fris d'urlar Choille f-Flannchadha, do Bhealach an Fhiodhfail go Cill Inghine Baoith i n-Uachtar Dalcais ria midhmedhon laoi. Sóait an lucht do-choidh budhes, tar a n-ais budh tuaidh, do Dhruim Fionnglaisi, do Choradh Fhinn, & go Cill Inghine Baoith i c-comhdháil Uí Dhomhnaill.” 1599.17 Pp. 2098, 2100

276 “*IS an c-ceid sheachtmain do Márta tánaicc gobernoir Cóiccidh Connacht .i. Sir Coners Clifort go Gaillimh go slogh mór do dagh-daoinibh uaisle & go saighdiuiribh iomdha amaille friú. Iar m-beith dó i n-gar do shechtmain i n-Gaillimh ro chuir a seacht, nó a h-ocht do bandadhaibh gallda & gaoidhelcha go Conntaé an Cláir dia fhios cia dob' umhal, no dob' essumhal don bhainrioghain innte do órdaigh Tepoitt Díolmain & captin Lestair, & Sirriam Chonntaé an Clair fein .i. Risderd Sgorlócc h-i c-cennus forra go rochtain doibh co h-airm i m-baoi Toirrdhealbhach Ó Briain Dia t-tuccadh mar an c-cédna ughdarrás uaistibh. Bádair an chéd adhaigh h-i c-Cill Caeidi i n-oirther O f-Fermaic iar rochtain doibh don tír.” 1599.21 Pp. 2104, 2106.*

277 “*Cidh tra acht ro chaith Diarmaid re denas go grodinnsaigtech gredanmór guasachtach in glanflaithes sin. isin bfogmar thosanach do tigernas Dhiarmada ar na deghoirechtaib, is ann do éirig in tiarla agus Uilliam Búrc tré báid agus tré buandúthchas, agus na búrcraig uile ar éntsligid, do trénchosnam Thuadhuman dá triath áirdríg tresoirderc .i. do Muirchertach milla malachdub menmnach mórtestach mac triathlínmar turaschróda tresinnsaigtech taob-fadglégel teglachlínmar Thoirdelbaig; óir do ba chara gan cheilg do na cniochtghallaib caomThoirdelbach, agus ro ba dalta dó in táirdrí dob áil leo d'óirdned do'n dul sin .i. Muirchertach michairglic mileta; gonad aire sin ro éirgetar i nénéfacht na hárdsluaig sin fá Uilliam mbélchorcra mbarraide mBúrc i dtimchell Muirchertaig dá mhórad. Is í so slige do gabatar na sluaig sin .i. d'innsaigid in Fiadhail in noirchill na himresna, óir is ann toghai leo in láthair ina gcuimeoscadais a gcatha do chosnam na críche tré chathimresnaib; óir do bí Diarmaid delbdígainn duasbogréid mac donnabrach Donnchaid co maithib a mhuintire i mbél in Fiadail ag imfuirech risna slugaib dá sraonad agus dá slisbernad, acht clann crechinn-saigtech Chuiléin amáin. óir do inntótarsan roime sin a nagaid risin rígiarla ag faicsin na finemna fire dá bfóirithin .i. in plannda d'fás ina naballghortaib, agus laogh ochta a nuasalrigan, agus sruth timchill a dtuathchóigcrioch, agus cúl comairce gacha cuilénaig chucu .i. in milid maothfoltchaom || mórtóirbertach Muirchertach.” P. 49*

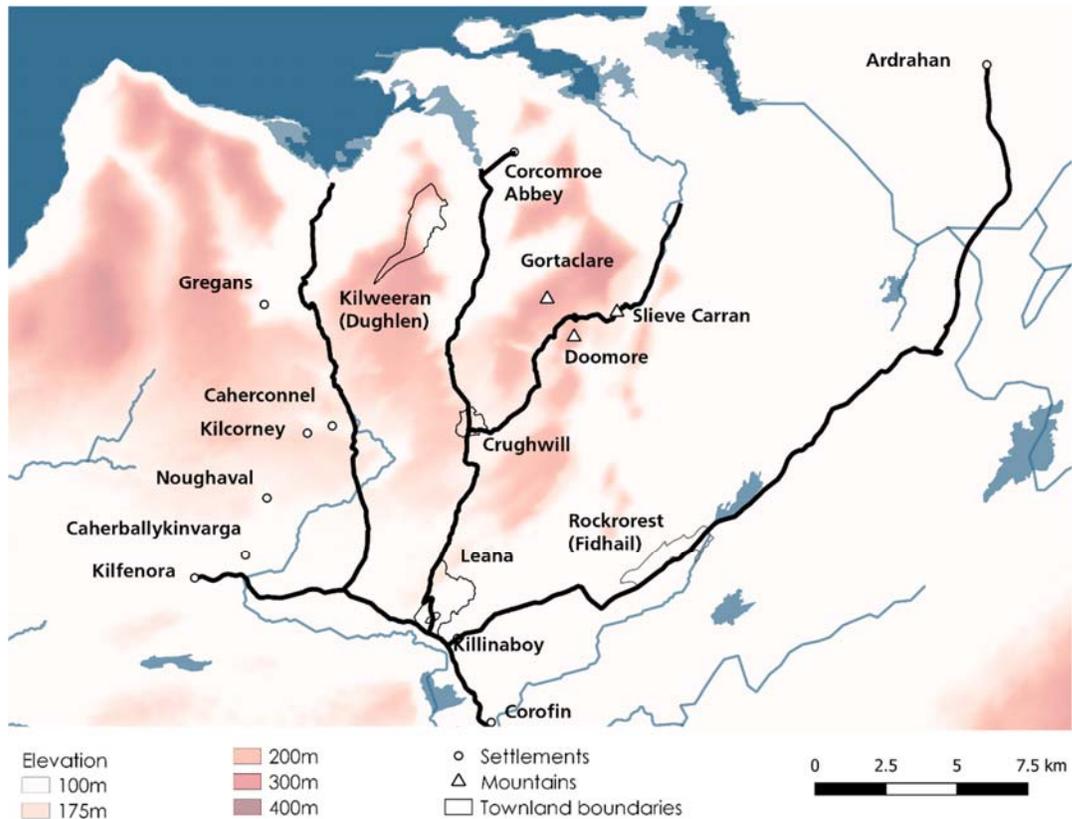


Figure 17: Road from Ardrahan to Killinaboy via Fidhail, approximated to the current road grid

The well-documented Dysert O’Dea campaign provides additional evidence of roads in central Clare. In 1318, Muirchertach Ó Brian [14] and Maccon Conmara [6], the kings of Clann Taidhg Ó Brian and Clann Chúillen, respectively, came to Bunratty to negotiate with de Clare. The deal went sour, and the Irish chiefs passed through the Cratloe woods, Uí Ainmire, Ballymulcashel and Cullane [Lough Cullaunyheeda] until they reached Mac Con’s *ceann áit* at Tulla.²⁷⁸ Interestingly, Tulla itself is not serviced by a major road in any of the

²⁷⁸ “Do cheilebratar dá chéile, agus do gluaisetar gusin áit i rabatar a neich agus a ngraijne agus a ngillanrad ag fuirech riu. agus do gluaisetar rompa go gusmar gaosmar glommenmnach láim re críchaib chuthardaingne craobhortacha coillmesacha na gCretshalach, i núib árdchnocacha áibinnréide echréidghlana iascaimgrecha abannghorma Aimridh, agus do baile úi Máil chricháibinn chnocáilainn chollchoillréid chaisil, agus i gcomair
92

later maps. Given its political and ecclesiastical importance, this could hardly have been the case in the 13th and 14th centuries.

While no road between Cratloe and Tulla appears in the later maps, they do depict a North-South conduit between Ardrahan and Quin, *circa* 10km Southwest of the main Mac Conmara residence. The first is mentioned once in the CT, as the site of an ill-advised stop by William de Burgh's army in 1318.²⁷⁹ Quin, as mentioned above was the site of one of the two English castles in Thomond during this period. The Annals of Inisfallen mention the existence of a public highway (*uia publica*) in the settlement²⁸⁰, and an excavation conducted by Graham Hull and his team found the remnants of an old cobbled road at the location.²⁸¹ From Quin, the road depicted in the later maps follows eastward to Limerick via Sixmilebridge, less than 3km south of Ballymulcashel, which we know from the CT to have been part of Muirchertach and Mac Con's itinerary. Being a wooded region so close to "Bunratty of the wide roads, galleys plenty and smooth ports"²⁸², Ballymulcashel would have been an ideal escape route into the heart of Clann Chúillen.

Richard de Clare, however, would not take no for an answer. As Mac Craith's narrative goes, he ordered his allies William de Burgh, Mathgamhain Ó Brian [8] and the Uí Ghráda to muster at Kilnasoolagh causeway.²⁸³ De Burgh never showed up, and the Englishman eventually set off on his own. The army reached Quin in the very same day, where they purportedly spent the night at St. Finian's monastery. In the later maps, both Quin and Kilnasoolagh are connected to a Limerick-bound highway that forks at Sixmilebridge. This town, however, sits at a good 6km from Bunratty castle, and it is unlikely that a capital described by Mac Craith as "wide roaded" (*ródlethan*), as we have seen above, would not be closer to a major artery. The mention of Cratloe in the itinerary of Muirchertach and Mac Con, after their botched parley in Bunratty is additional evidence of a southern road along the

chumair chomchoitchinn chadlecaig chnocdeghradairc carraig rianaig Cuilén, agus go tulaig árdoiregda uasalmírbuilig óirlegh minnaig aiffrendlógmair fosgadchlogbinn fírchadasaig oirecht línmair fialchomarbaig erlamchoitchinn na nespoc" O'GRADY (Org.), **Caithréim Thoirdehalbhaigh**, p. 138.

279 "agus gér b'é Mac Uilliam, do tinóil a tromsluag agus táinic leo in lá sin go hArd raithen." *Ibid.*, p. 140.

280 "Item eodem anno in festo beati Andree apostoli Der(micius) (O Bria)in occidit quosdam de Clainn Culean in uia publica eidem iuxta Cuinchi resistentes." ANNALS OF INISFALLEN, 1312.2 MAC AIRT (Org.), **The Annals of Inisfallen**, p. 414.2

281 HULL, Graham, **Quin Friary, Quin, Co. Clare: Final Archaeological Excavation Report**, [s.l.: s.n.], 2017.

282 "bun ródlethan rámlongach réidportach Raite" O'GRADY (Org.), **Caithréim Thoirdehalbhaigh**, p. 138.

283 "Imthúsa in Chláraig: do chuir fesa agus techta go sir Uilliam óg a Búrc, dá rád ris Mathgamain O Briain agus cenél nDúngaile cona noirechtaib agus cona nimirgedaib do dion agus do tidlacad go coraidh cille suaichenta solasgainmige srebinfuairé sruthgairb mire Subalaig" *Ibid.*, p. 140.

Shannon estuary, probably linking Castleclare all the way to Limerick.²⁸⁴ If Mac Craith’s description is accurate, de Clare must have taken the Southernmost route and followed the Rine river upwards to Quin. From there, they advanced through *fiadh uachtarach* and camped at Ruan, as had Maccon Mac Conmara done in his own march to Dubh Glen the year before. de Clare crossed the Fergus river at Coradh Néill (*i mBél Coraidh [...] Néill*) – according to Westropp, another name for Aughrim or “Achrim”’s causeway (*Caraidh Echdroma*), a crossing also mentioned in the itinerary of Maccon Mac Conmara’s 1317 campaign.²⁸⁵

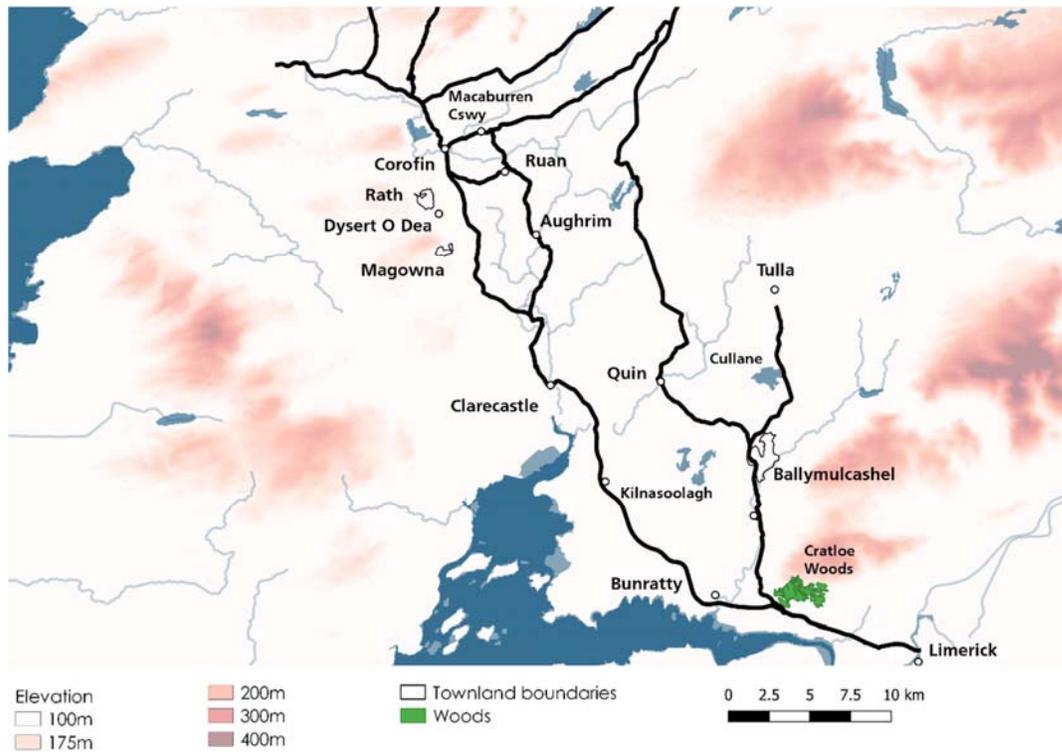


Figure 18: Routes and places of the early Dysert O’Dea campaign approximated to the current road grid

284 “Do cheilebratar dá chéile, agus do gluaisetar gusin áit i rabatar a neich agus a ngraijne agus a ngillanrad ag fuirech riu. agus do gluaisetar rompa go gusmar gaosmar glonmenmnach láim re crichaib cluthardaingne craobthortacha coillmesacha na gCretshalach” SÉAN MAC RUAIDHRÍ MAC CRAITH, *Caithréim Thoirdhealbhaigh*, p. 138.

285 WESTROPP, *The Normans in Thomond. Part I., 1275-1287*, p. 469.

Notably, not one, but four places mentioned in these two accounts (Aughrim, Ruan, Tullyodea and Macaburren) are situated next to a meandering path that intersects the modern R476 near Corofin (Fig. 19). It would be an astonishing coincidence if this routeway did not have a medieval precursor, especially given that it follows another natural passage between the mountains northwards to Co. Galway. As an important river crossing, Corofin was definitely part of the grid, and a “stony road” (*cloch ród*) in the village is mentioned in 1573 by the Annals of the Four Masters.²⁸⁶ However, since Maccon Mac Conmara opted not to use it in 1317, going from Aughrim straight to Macaburren’s causeway, it is likely that the contemporary routeway across the townlands of Bealickania, Loughmore and Kells also existed at the time. This would make sense, given that, in Westropp’s opinion, Tullyodea (*Tulach*) used to refer not only to the contemporary townland of the same name – and probable location of the inauguration mound of the local chief lineage, the Uí Dheaghaidh – but also to Caherlough.²⁸⁷

286 “*Lottar iaramh tré cloch-ród Coradh Finne, & lá dorus Innsi I Chuinn, & do Bhóthar na Mac Ríogh*” 1573.10 p. 1668

287 WESTROPP, On the External Evidences Bearing on the Historic Character of the “Wars of Torlough,” by John, Son of Rory Mac Grath, p. 154.

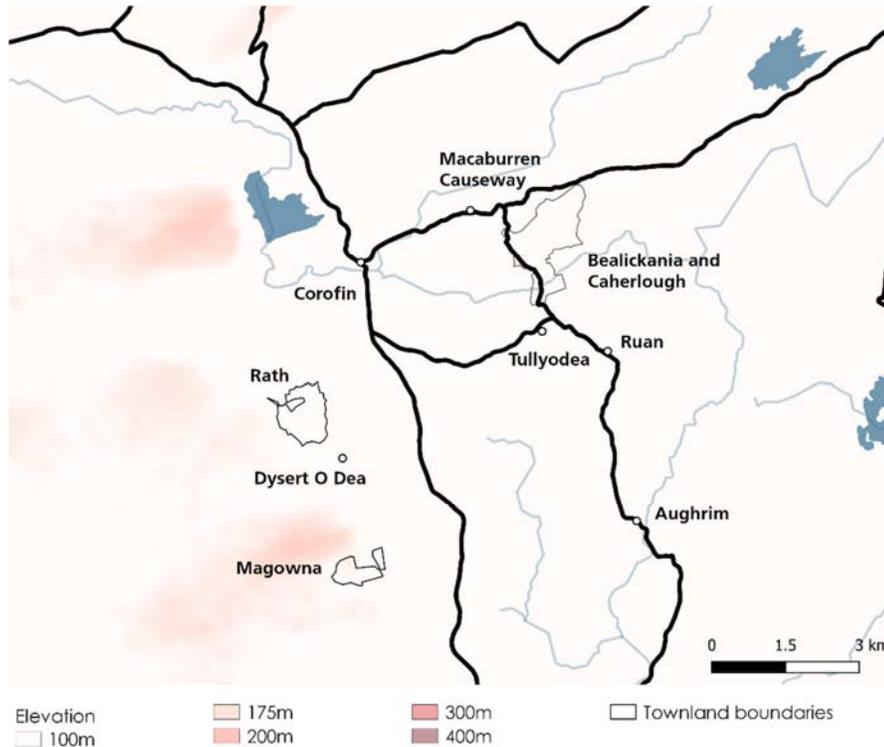


Figure 19: Routeways around Dysert O’Dea approximated to the current road grid

The CT tells us that de Clare subsequently split his forces into three armies.²⁸⁸ One headed to Tullyodea and from there to Rath, close enough (c. 2km) to the Corofin-Clonroad road to let us infer that the soldiers might have briefly followed along its course. The second, led by de Clare himself, proceeded due west to Dysert, where the monastery of Dysert Tola – and, presumably, the Uí Dheadhaigh *ceann áit* – were. A third one skirted the Fergus river, passing through Kinelcualachta and Magowna.²⁸⁹ No major road linked these two locations, but the narrative suggests that a pathway might have followed the river’s banks. A similar

²⁸⁸ “Dála in Chláraig: ar ndegail na maidne fa hingna leis nemchorraige in tíre ina thimcell, amail do beitis i síth ris. agus dogní trí cóirigte dá tromsluag do léirchrechad in tíre do gach leith, do marbad a mban agus a mbaothmacám” O’GRADY (Org.), *Caithréim Thoirdhealbháigh*, p. 142.

²⁸⁹ “Dála in Chláraig: ar ndegail na maidne fa hingna leis nemchorraige in tíre ina thimcell, amail do beitis i síth ris. agus dogní trí cóirigte dá tromsluag do léirchrechad in tíre do gach leith, do marbad a mban agus a mbaothmacám. agus d’órdaig córugad díob do ghluasacht do tulaig taobtaithnemaig ua nDegaid siar gusin ráith radarcáibinn; córugad eile láim re Forgas tré chenél gCuallachta go magh minfêrghlas nDomnaig; agus triallas féin go réimdirech maraon re huaislib a tromtinóil gusin ndisert siar gach ndirech, mar a raib isdad connaide í Degaid in tan sin, dá lomargain” *Ibid.*

route might have linked Quin and the highway between Bunratty and Clarecastle along the course of the Rine, although the CT does not state for certain that this was the path that Richard de Clare took. If river banks could indeed function as natural pathways, the fact that many water courses run perpendicular to the existing highways may hint at a more complex and efficient communication network that Thomond's sparse road grid might suggest at first sight.

After learning of de Clare's presence in his kingdom, Conchobhar Ó Dheadhaigh sent an emissary to appease the English lord, but things soon escalated to violence. Luckily for Ó Dheadhaigh, word of the battle soon reached Muirchertach Ó Brian [14], who was camped in the woods of Echtge. His timely march to rescue his subject offers additional clues of the communication network. According to the CT, Muirchertach assembled his forces and reached the Fergus coming from Spancelhill, roughly 6km to the northeast of Clonroad, next to the contemporary R352 linking Ennis to Tuamgraney.²⁹⁰ Muirchertach and his forces must have likely crossed its precursor, then followed the Fergus northward until the crossing at Aughrim, arriving at Dysert in time to save the day. That a road existed here also makes sense from a geopolitical standpoint. Spancelhill is located roughly halfway between Clonroad and Tulla, and *circa* 6km from the Uí Brian inauguration mound at Magh Adhair. Given the close ties between Clann Taidhg Uí Brian and the Mic Conmara and the importance of Magh Adhair for both chiefdoms, a corridor at this location would be a strategical asset.

²⁹⁰ *“agus gluaisit ria nglanad in lái go lántsoillsech tar maigib minférghlasa in machaire siar, agus do chnoc úráibinn uarchaille agus gusin bForgas siar go síraichbéil”*. *Ibid.*, p. 144.

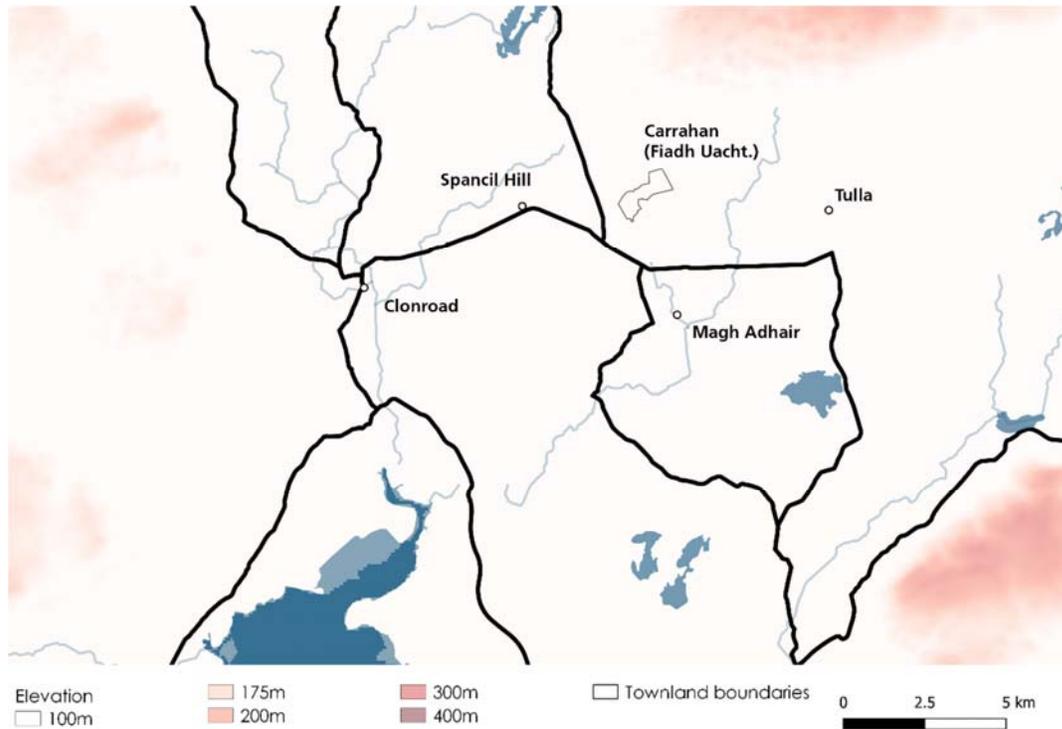


Figure 20: Route between Tulla and Clonroad approximated to the current road grid

Not all campaigns are described in the same level of detail as Dysert O’Dea’s, but the CT also provides valuable (if tentative) evidence of routeways at the fringes of Thomond.

In the case of Corcabhaischin, a large kingdom situated in Western Thomond, we are told that in 1305 one Toirdhealbach Óg Ó Brian invaded the chiefdom and met the forces of the local kings, the Mic Mathgamain in their *longport* at Kildysart.²⁹¹ Pratt’s 1708 map depict a path from Clonroad to Aylroe. At its closest, the highway would be only a few kilometers from Kildysart, being well within reach of the invading soldiers. According to the map, the road branches at Clondegad, from with a tributary continues all the way to Kilrush via Cranny, at the top of Irrus’ peninsula. O’Keeffe attributes the construction of this segment to the English retreat in Southern Clare, believing it dates from the battle of Dysert O’Dea, “if

291 “*Fecht eile dá dtáinic Toirdelbach turuschróda tréinnsaigtech toscarrachta tromneimnech mac Briain ruatharmhir roscálainn ruaid i gerichaib Chorcabhaiscinn do braithiarraid bhaogail ar a bhidba daib: agus ní cian sin tír táinic Toirdelbach in tráth do fuair a uasalbidba ina fhogus i nDisert murthaile míntráchtach. fa hiat so na saorbhidbada sin .i. Ruaidri binnfoclach brethriaglach buide agus Tadhg menmnach michairréid Mac Mathgamna; gur iadsattimhell na solusbruidne, gur marbadh Ruaidri agus rigThadg do’n ruathar sin, amail adubairt in tugdar agá innisin ar na himtechtaib sin” Ibid., p. 29–30.*

not earlier”.²⁹² Whether or not the roads depicted by later maps had already been opened, it is likely western Corcabhaischin was already connected to central Thomond in some way. Robert M. Chapple’s analysis of ringfort distribution on the Loop Head peninsula in southwest Clare enumerated many routeways of possible early Christian origin.²⁹³ It is likely these routeways – or at the least some of them – were still operational by the later medieval period, given that monasteries in the region are mentioned in ecclesiastical taxation records.²⁹⁴ O Lochlainn found Early Medieval evidence of a journey around the same route²⁹⁵, and the CT claims Toirdhealbhagh Óg, one of Brian Ruadh Ó Brian [7]’s sons, raided Irrus in 1284.²⁹⁶

An anonymous c.1690 map now part of Fredrik den Femtes Atlas provides further evidence for routeways in Western Thomond.²⁹⁷ The document shows a routeway connecting Clarecastle, Kilfenora, and an unnamed monastery in the Loop Head peninsula. The Irrus-Clarecastle segment bifurcates northward at Kilrush. This location is not named in the map but can be identified because it stands next to two isles most likely representing Scattery and Hog Islands. This routeway would have passed through the monastery of Kilmacduane and Tromora near Quilty on the coast, chief residence of the Uí Bhriain of Uí Bhréacáin. Kilmacduane is mentioned in the context of the wars of 1276-1318 by a fourteenth century account of miracles known as *Miorbuile Senáin* (“The Miracles of St. Senan”).²⁹⁸ Both places are mentioned by name in the CT. Because the segment ends in Kilfenora, it would effectively merge into the *Bóthar na Mic Riogh*, thus connecting Irrus (Loop Head) and Uí Bhréacáin with Corcamruadh and Cenél Fermaic. It is noteworthy that all of these regions were under the control of the same ruler, Mathgamhain Ó Briain [8], *tánaiste* of Thomond

292 O’KEEFFE, *Ireland’s Principal Roads, 123 AD to 1608.*, p. 117.

293 CHAPPLE, Robert M., *A Statistical Analysis of Ringfort Distribution and Morphology on the Loop Head Peninsula, Co. Clare.*, Belfast: Oculus Obscura Press, 2011, p. 328.

294 SWEETMAN, H.S. (Org.), *Calendar of Documents Relating to Ireland, 1302-1307*, London: Longmans & Trubner, 1886, p. 301, No. 723.

295 O LOCHLAINN, *Roadways in Ancient Ireland*, p. 469.

296 *Cidh tra acht ar marbadh mórDonnchaid do’n turus sin le Torrdelbach, do imráidhetar acu indsaighid in nIrrus dá hargáin co hamnáirech d’aind||éin a triatha tresminic tréinloing sigh taomdána tidlaictigh Torrdelbaig óic armcorcra órdhuasaigh enechréidh mic Briain ruaidh, dá díchur nó dá dianmarbadh.* SÉAN MAC RUAIDHRÍ MAC CRAITH, *Caithréim Thoirdhealbhagh*, p. 24.

297 *Håndtegnert Kort over Irland ca. 1690 med det danske og norske Våben.* In: *Frederik den Femtes Atlas*, Bd. 9, Tvl. 17, Det Kongelige Bibliotek, c.1690.

298 “óir tainic Toirrdelbach mac Taidg féin da n-ionnsaicched, go rainicc go tegh Senain maille le sochraite mor sluaigh, 7 do fhuirigh ann an oidhche sin, 7 do chúaidh ar na bharach go Cill mic an dubáin, 7 do bi ann ind oidhche sin.” PLUMMER, Charles (Org.), *The Miracles of Senan*, *Zeitschrift für Celtische Philologie*, v. 10, 1914, p. 10.

under Clann Briain Ruaidh, and one of the major political players in the time of the CT. A route connecting his territories would have been crucial to their administration and defense.

For Cenél Dunghaile, the kingdom of the Uí Ghráda in northeastern Clare, we have more room to speculate. According to the CT, in 1314 Muirchertach Ó Briain [14] and his Clann Taidhg’s forces crossed a river at Scariff, a causeway between Lough O’Grady and Lough Derg just north of Tuamgraney.²⁹⁹ Muirchertach’s fortunes soured with an unexpected defection, forcing he and his army to retreat upland until they reached Forbar.³⁰⁰ The ford is mentioned again in the record of a 1315 campaign, in which Donnchad Mac Domhnall Ó Briain [11] pitched his troops “at the mouth of the white ford of Scariff, so that therefore they could spring into battle”.³⁰¹ The maneuver was most likely an attempt to ambush the armies of Muirchertach Ó Bhriain [14] and Maccon Mac Conmara [6], who eventually rushed to that ford to meet them.³⁰² It is evident from these passages that Scariff was a river crossing of some importance, and all the more certain that it was connected to a road of some kind.

While neither of the later maps depict a road near Cenél Dunghaile, a 1691 chart by Christopher Browne “Done from Sir William Petty’ Survey” complimented with “Peticuler Corrections By Latter Survey’s Never Before Published” includes a road connecting Scarriff, Killaloe and the mountains of Echtge at the other side of the river.³⁰³ Had it existed in the Middle Ages, this conduit would have connected the Uí Ghráda’s heartlands with two other chiefdoms, Uí Conghaile and Uí Thoirdhealbhaigh, providing a vital communication artery to the Uí mBloid *trícha cét*. No road remotely as straight as the one in Browne’s map survives in the present landscape, and the steep hills to the west of Lough Derg would likely have proven a challenging terrain for medieval armies to traverse. Yet, it is possible the road is the

299 “*Imthúsa í Briain cona borbsluagh: do sciamgluaisetar tar Scairb sair co sotalcui*” SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, p. 81.

300 “*Otconnaire O Briain in brathimpódh sin na mblaidech agus uaiti a fedhnach, do órdaig sciath tar lorg tar na lebartaintib línmara. agus do éidset a nárdchuraidh, agus rosfoillsighit a bhéithonchoin, agus rosgairmid a ngillanraidh do timáin a táintedh agus d’imarcu a nédaighedh, agus rosmúinid a marcsluaigh, agus do gluaisetar co ciuinmalla céimfoisdinech casimpódach tré clár-lergaib in cnuicléibe. agus rucatar tosach in trénsluaigh ar deiredh na degdruinge; agus da hintadh co hurmaisnech ag na huaislib, gur teilgetar in tosach as a taobderedh agus co rabatar isin éncathimh imruagtha sin ó áth na scairbe co sciam Forbor.*” *Ibid.*, p. 82–83.

301 “*Imthúsa í Briain cona borbsluaghaib agus in Cláraigh cona cathmarcsluaigh: do léigedar ríghchrecha ruagdígaide rianainig necha raonaidbsecha ruatharbeodha ríngúdhúnacha || fá ib Rón gaile, agus do an in Clárach na comnaidhe ar clárúrlár na caomtuaiti ag tabairt gradha gallraidredh do na glasgallaib. is ann sin ro suidhedh saorDonchad sluaighlinmar mac Domnaill dercabradguirm cona degfedhnachaib ar bél in bánátha na Scairbe cum scainnerthroda.*” *Ibid.*, p. 85. (Author’s translation)

302 “*Otqualaid Muircertach agus Maccon comnaidhe caomDonncaidh, rugatar dianru athar dilennnda co bruachaib indátha dá indsaighidh.*” *Ibid.*

303 BROWNE, Christopher, **A New Mapp of the Kingdome of Ireland**. London, 1691.

simplification of a precursor of one of the contemporary roads between Killaloe and Tuamgraney. The Archaeological Survey of Ireland's Sites and Monuments Record database (ASI SMR) lists a number of pre-modern sites clustered around R463 near Ogonnelloe – whose name is anglicization of Uí Conghaile and whose territory likely corresponds to the former kingdom.³⁰⁴ The presence of these sites suggest the winding paths at the base of the Caher mountain might have had older precursors – including, perhaps, the ones taken by Donnchad Mac Domhnaill Ó Bhriain at the time of the events of the CT.

Browne's map suggests a link between Scariff and Killaloe. Located at the mouth of Lough Derg, the current parish of the same name was the location of Béal Bóroimhe, the site of a ringfort and river crossing mentioned by the CT as one of the limits of Thomond.³⁰⁵ Killaloe itself was the location of one of the most important cathedrals in Thomond, seat of the diocese of the same name with ecclesiastics supplied from the Uí Bhrian, Uí Ghráda, Uí Cinneide and other powerful clans.³⁰⁶ According to O Lochlainn, Killaloe was serviced by the Slighe Dhala Meic Umhoir, one of the five major highways of Ancient Ireland and the main artery between Munster and Tara.³⁰⁷ This arguably made Killaloe one of the most well-connected settlements in Munster, and a gateway to one of the most important, reliable and well-known routes leading into and out of Thomond. The later maps depict a road connecting Killaloe with Sixmilebridge, which O'Keefe dates from the Early Middle Ages.³⁰⁸ A second highway linked the church with the city of Limerick, in the south. In 1315, Edward Bruce's army invaded Munster, following a course from Nenagh to Singland, near Limerick. The mention of an Irish army assembled in the vicinity of Castleconnel by the other side of the Shannon suggests that a similar road might have existed at the time of the CT (Fig.21).³⁰⁹

304 ARCHAEOLOGICAL SURVEY OF IRELAND, **Historical Environment Viewer**, available at <<http://webgis.archaeology.ie/historicenvironment/>>, access date: 04/06/2019

305 “*Ar dtecht d'uramas Eirenn i seilb ghall isin mbliadain d'áis Chríst. 1172. [mile agus céad agus dá bliadain dég ar trí fichit] agus ar scarad cáimríge re gach cloinn d'fuil Míledh espáine, do gab Donnchad crannruad cathlínmar cairbrech tar éis a athar [.i. Domnall mór] flaitheis fairsing forlethan agus cennas clúoirrdere cosantach ós tírthaib taithnemacha taobáilne Tuadmuman; agus fa hé imláine na ríge sm .i. ó léim chiantestach Chonculainn go háth na boraimhe, agus ó imlib brugaobda Birra go cnoc Aine chliach, agus ó eoganacht chlármin Chaisil go tuaiscert na Bóirne bánchlochaige.*” SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, p. 1–2.

306 MCINERNEY, Luke, **Clerical and Learned Lineages of Medieval Co. Clare: A Survey of the Fifteenth-century Papal Registers**, Dublin: Four Courts Press, 2014, p. 4, 222.

307 O LOCHLAINN, Roadways in Ancient Ireland, p. 471.

308 O'KEEFE, **Ireland's Principal Roads, 123 AD to 1608.**, p. 131.

309 “*Agus as a haithle sin táinic Muircertach O Briain a triath agus a tigerna istír; agus isedh tuc nach uime tucadh in cathruathar sin, a dul d'Ath cliath i cuidechta in Buitiléir na hErenn do chasáid in Cláraigh re hárdghallaib Erend.i. re muindtir in rígh, tréna beith ag cunnam le cloind Briain ruaidh noch do chuaid ar cenn albanach i nUlltaib, agus in nech do sdiur na catha sin na cuidechtaib agus na cóirighthib gu Caisel na*

Intriguingly, O’Keeffe dated the highway between Sixmilebridge and Limerick to no earlier than the 17th century.³¹⁰ Limerick, however, was most definitely connected to some road, as we are told that in 1277 de Clare and his allies marched straight from that city to Clonroad.³¹¹ If O’Keeffe is right and the road in the later maps did not exist in the 13th century, de Clare’s army must have taken a highway following the Shannon estuary via Cratloe, Bunratty, Kilnasoolagh and Clarecastle. This route is missing from the cartographic sources, but all these locations, as we have already seen, are mentioned in military itineraries around Bunratty.

righ, agus as sein do'n Aonach dá rabadar na cosdadh agus na comnaidhe, agus as sein co caislén í Chonaing re trell ele: agus do bidar tromsluaig Tuadmuman re hagaidh na sluagh sin man Sinaind.” SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, p. 133.

310 O’KEEFFE, **Ireland’s Principal Roads, 123 AD to 1608.**, p. 131.

311 “*triallait in tromsluag sin itir gháidel agus ghall do toisc aonoidche tar dóirsib Luimnig alé, agus ní dernad fos ná comnaide leo go rángatar faitce féruaine cluana rámfada sul d’éirig in ghrian ghnúistsolas,*” p. 6

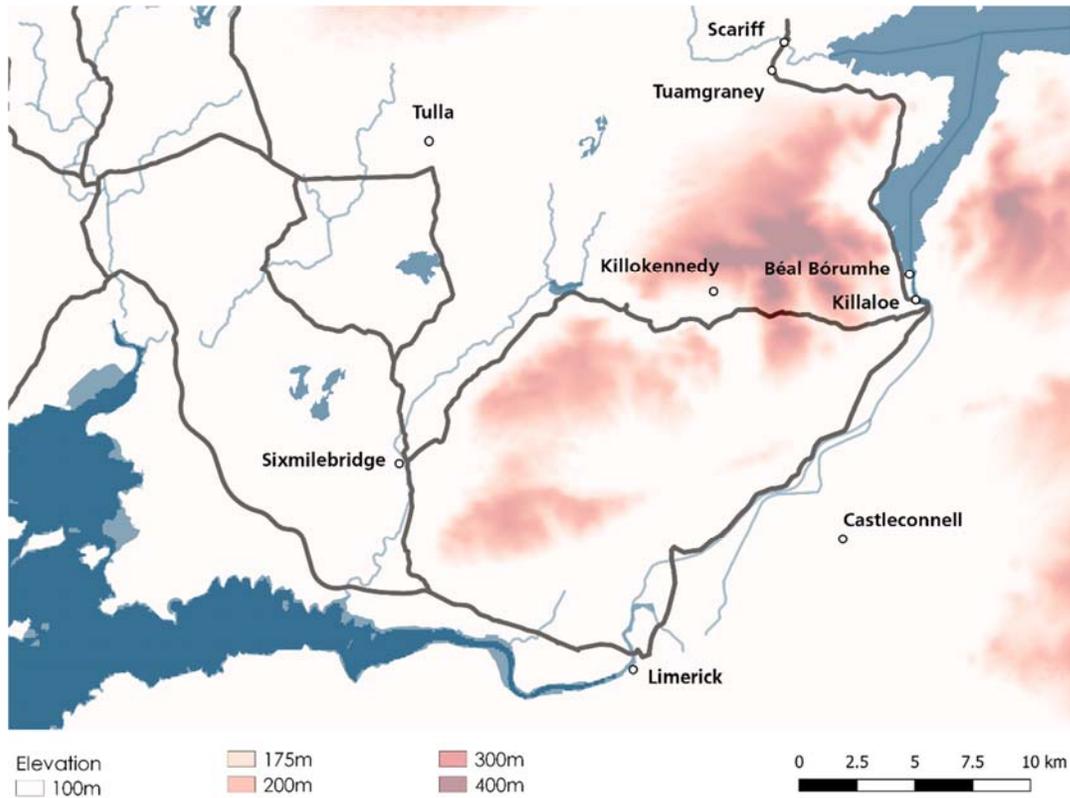


Figure 21: Routes leading to Killaloe approximated to the current road grid

Richard Clutterbuck argued that every cashel or tower house was connected by a routeway at some point.³¹² The ASI SMR database lists a concentration of cashels in a Northwest-Southeast channel from Bunratty to the Burren coast, covering the bulk of the highways listed so far. The reconstruction also seems to fit the distribution of woodlands and mires in Thomond (Fig. 22).³¹³ Partial as it is, this strongly indicates that the grid sketched here comprised the heart of Thomond’s communication network.

312 CLUTTERBUCK, Richard, Cahermacnaghten: routeways and movement in a native landholding, *in*: **Burren Landscape and Settlement, An INSTAR PROJECT.**, [s.l.]: Heritage Council, 2008, p. 146.

313 ARCHAEOLOGICAL SURVEY OF IRELAND, **Historical Environment Viewer**, available at: <<http://webgis.archaeology.ie/historicenvironment/>>, Access Date 06/09/2019

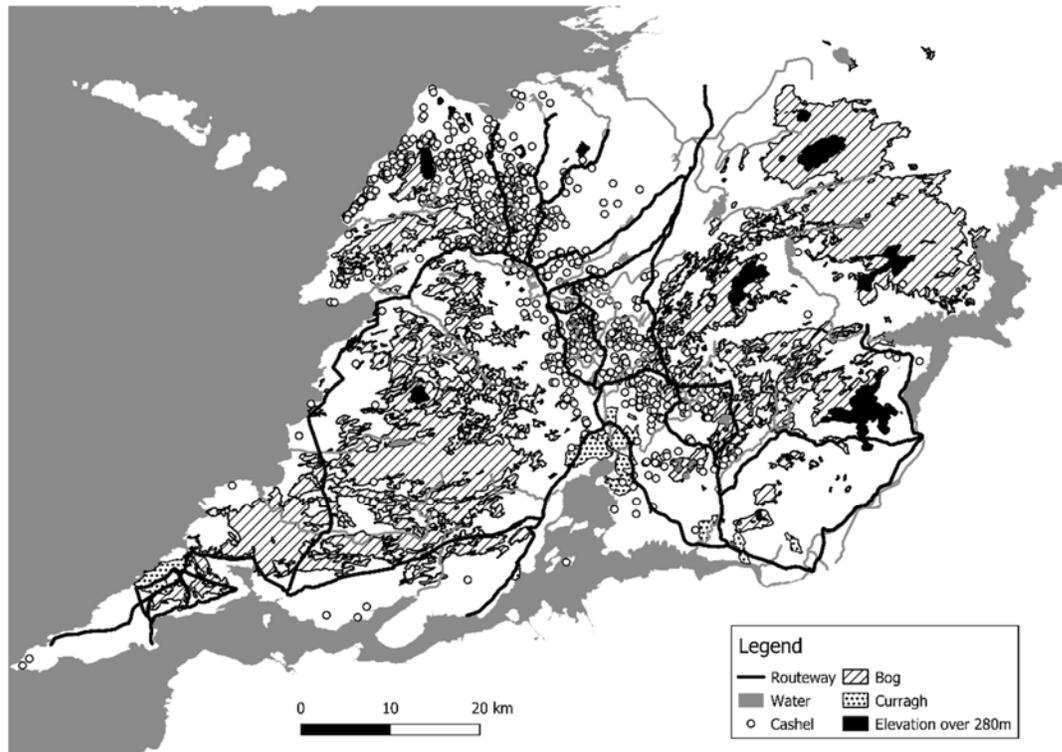


Figure 22: The communication network of medieval Thomond approximated to the current road grid

The map in fig. 22 indicates that medieval pathways disproportionately favored a central corridor connecting Ardahan, Co. Galway to the city of Limerick, on the Eastern bank of the Shannon. This network connected several sites that are known or assumed to have been residences or monasteries belonging to and sponsored by Thomond’s ruling lineages. At the same time, it suggests that vast swathes of the kingdom were not serviced by any major route.

It is impossible to gauge the importance of this finding from this map alone, as it does not show is how effective these routes were to negotiate friction of terrain. While some of these paths – such as the route between Bunratty and Limerick – are described in a way that suggest they were properly maintained roads, we know relatively little about other routeways beside the fact that they probably existed³¹⁴. Without this data, we have no way of answering

314 In the CT, Bunratty is described as “wide roaded” (*ródlethan*). In a different passage, the road to Bunratty is called a “royal highway” (*rigslihedh*). O’GRADY (Org.), *Caithréim Thoirdhealbhagh*, p. 138, 16 respectively.

a more fundamental question: to which extent was this communication network molded to fit existing patterns of settlement and to which extent it was, just like the settlement themselves, a “conjunction of natural realities - partly fashioned by humans”?³¹⁵

2.5. Rate of march

As Scott remarks, it is hard to gauge what “distance” meant in a Pre-Modern context from contemporary maps alone, “in which a kilometer is a kilometer no matter what the terrain or body of water”.³¹⁶ Before the revolutions in transportation that took place in the 19th century, the standard unit for measuring the length of a course was not distance, but time – specifically, the day’s travel.³¹⁷ Fortunately for us, the CT contains meticulous descriptions of the itinerary of armies in march – in some cases, with precise references to the passage of time. By comparing these accounts to the map in Figure 22, we can infer which routes were taken by the parties, and how many kilometers were purportedly traversed in a single day’s march.

As befits the hyperbolic tone of the prose tract, de Clare’s first action against Clann Taidhg Ó Briain is preceded by a march of epic proportions. In 1277, to depose the eponymous hero, Toirdhealbhadh [9], de Clare and his allies made a remarkable long march, travelling from Limerick all the way to Clonroad in the course of a single night.³¹⁸ The most straightforward route connecting these two localities was probably via Bunratty and Clarecastle, which gives us a distance of 38km. A single day was also what it took for Maccon Mac Conmara and Muirchertach Ó Briain to march from Thomond Bridge, Limerick to Tulla via Cratloe and Ballymulcashel, a 33km’s march.³¹⁹

315 GRAVEL, M. Distances, communications et expansion territoriale dans l’Empire carolingien. In: WEHNER, D. et al. (Eds.) **Landscape and Societies in Medieval Europe East of the Elbe: Interactions between Environmental Settings and Cultural Transformations**. Toronto: Pontifical Institute of Mediaeval Studies, 2013, para 2. Available at: <<http://cour-de-france.fr/article3688.html>> (Access Date 29/08/2019)

316 SCOTT, **The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia**, p. 48. p. 48
317 *Ibid.*

318 “*Dála in Chláraig: chuires tinól ós ísel go deithbirech ar gallaib Muman as gach áird ina rabatar, agus do hórdaiged acu techt lá cinnte go léirtinóilte go Luimnech i ndáil Briain (...) tángatar ann clann Gherailt chaithechtach agus gasrad ghuaisbertach in Buitiléir. triallait in tromsluag sin itir gháidel agus ghall do toisc aonoidche tar dóirsib Luimnig alé, agus ní dernad fos ná comnaide leo go rángatar faitce féruaine cluana rámfada sul d’éirig in ghrian ghnúistsolas*” SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaidh**, London: Irish Texts Society, 1929, p. 6

319 “(...) dorignetarsan inní sin agus tángatar leo go cenn droichid Tuadmuman (...) Do cheilebratar dá chéile, agus do gluaisetar gusin áit i rabatar a neich agus a ngráifne agus a ngillanrad ag fuirech riu. agus do gluaisetar rompa go gusmar gaosmar glonmenmach láim re crichaib cluthardaingne craobthortacha coillmesacha na gCretshalach, i núib árdchnocacha áibinnréide echréidghlana iasmaigrecha abanngorma

Still in 1277, king Toirdhealbhach Ó Briain [9] sought refuge with the Mic Mathgamhna of Corcabhaiscinn, who nevertheless refused to cede him troops.³²⁰ To that end, he headed to Tromrah, a residence of Domhnall mac Tadhg Álainn Ó Brian, chief of a cadet branch of the Uí Bhriain who ruled over the subkingdom of Uí Bhréacain.³²¹ The next night, he headed to Corcamruad to sway the local king, Domhnall Manntach Ua Conchobhair.³²² We can deduct from the CT that Toirdhealbhach departed from one of the Mic Mathgamhna's residences, but Mac Crath does not give us an exact location. The fact that he purportedly "headed straight northwards" to Tromrah suggests he might have come from Kilrush, the location of a monastery sponsored by the Mic Mathgamhna in whose vicinity a secular residence most likely existed.³²³ The location of his meeting with Domhnall Manntach is not given either. However, if we assume, they met at the Uí Conchobhair *ceann áit*, that would mean a trip from Tromrah to Caherballykinvarga – also, according to the CT, in the course of a single day's march. The first stage of the trip would have covered c. 20km; the second, a little over 32km.

While the numbers above often exceed 30km/day, other marches recorded in the CT seem to have been shorter. In 1314, Muirchertach Ó Briain [14] rose in Fidhail in the morning and travelled 13,4km to Tullyodea, where he spent the night.³²⁴ In 1317, Maccon Mac Conmara [6] went from Ruan to Aughrim, then switched directions and proceeded until

Aimridh, agus do baile úi Máil chrícháibinn chnocáilainn chollchoillréid chaisil, agus i gcomair chumair chomchoitcinn chadalceais chnocdeghradairc carraig rianaig Cuiléin, agus go tulaig árdoirgeda uasalmírbuilg óirlegh minnaig aiffrendlógmair fosgadchlogbinn firchadasaig oirecht linmair fialchomarbaig erlamchoitcinn na nespoc. do anatar sin isdad uasal áirdchille sin in oidche sin. SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p. 138

320 "agus gidbé eile ar ar chinnetar, nír faomsat clann Mathgamna coméirge i gcath le Toirdelbach do'n dula sin d'egla Briain agus in Chláraig." SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p. 7

321 "Triallas maraon re huathad dá fircháirdib mar sin fó thuaid go réimdírech, gur gab osad na haonoidche sin i dTromráith i dtig Domnaill meic Taidg álainn." SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p.7-8

322 "go ndechatar sin oidche d'ár gcionn d'fios Domnaill buanoinig manntaig.i. i Chonchobair chorcamoruaid, mar a bfuair fáilte agus fircharadrad agus mar ar snadmatar a mbuanchumann agus a gcáirdes re chéile." SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p.8

323 MCINERNEY, L. **Clerical and Learned Lineages of Medieval Co. Clare**. Dublin: Four Courts, 2014, p. 143

324 "Cid tra acht do anatar in oidhce sin isna hinadaib cédna co cosgrach commáidmech comfháiltech co maidin arna máirech. agus do éirgedar san findmaidin, agus tucatar tosach tiughdaingen tromarmach triatharrachta tréncobsaidh trebar dlúith réсна sluaighaib isan slighidh; agus do órdaighetar in datmarcluagh dlúith-egair donnarmach dergsciathach dosgáilti gu daingen ar doredh, agus a lucht gonta agus a nglassluaigh, a naos ógbaidh agus a nanbanda, ar a lár dá lebarcoiméd. rucatar fichruathar foisdinech gu tulaig ndonnfledhaigh i Deaidh agus do ansat co huallach osgurda indoidchi sin indti." SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p.80

Macaburren’s causeway via Tullyodea, where his troops rested.³²⁵ The itinerary, such as written in the CT, would have amounted to 12,8km. Yet, as alluded above, the text gives us no reason why Maccon would have taken the detour. If Mac Craith made a mistake and the army actually marched from Ruan straight to Macaburren, the distance falls to a mere 4,2km.

There are also instances of marches that are precisely dated, but whose itineraries and/or destinations cannot be ascertained for sure. In 1318, for example, Richard de Clare took a day to get to Quin and yet another from Quin to Ruan.³²⁶ Quin was connected by a North-South corridor linking Ardrahan to Limerick, from which the Fergus could be reached by heading west towards Spencilhill to the crossing at Clonroad. However, we are specifically told that de Clare crossed the river at Aughrim rather than Clonroad.³²⁷ There is little reason to believe otherwise, as a marauding English army rampaging over the Uí Bhriain seat of power is not a detail that Mac Craith would have an interest in omitting. It is most probable that de Clare took a different northwest-bound path to Aughrim, either following the Tulla – Clonroad routeway up to Spencilhill, or through a different route that has eluded the records.

While neither of these marches can be precisely plotted, they do not seem to deviate from the marches that can. Following the contemporary road grid, a trip from Bunratty to Quin (assuming the army passed through the assembly point at Kilnasoolagh) covers roughly 20km; from Quin to Aughrim, (assuming a march via Spencilhill), 16,7km.

Dates	Departure and Destination	Distance (in km/day)
1277	Limerick - Clonroad	38

325 “agus is í so slighidh ar sheoladar || na sluaigh sin lesin bfuachadh fraeachinduid forniata fíchinnsaighthech feirgi sin: ó ma[i]gh na poll puballglan, agus do bernaidh craebtorthigh í Chaillin, agus do lecht laomscarraidhech ingine í Lochlainn leabartesdaigh, agus í claind Cuilén uachtaraigh co hindeldírech, agus í caraidh ech[d]roma co haithcobsaidh éstechtchiuin, agus lá[i]m clé re caomthulaigh ndrúchtbraonglais ndathlergmao[i]th ndegthesdaigh í Deadhaid, agus tar bruachaib bánstrothacha Besgnatan, agus a caraidh mic amboirend mbélchumgi bórdsléimne.” SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p.98

326 “Imthúsa in Chláraig: do chuir fesa agus techta go sir Uilliam óg a Búrc, dá rád ris Mathgamain O Briain agus cenél nDúngaile cona noirechtaib agus cona nimirgedaib do díon agus do tidlacad go coraidh cille (...) Subalaig, agus go rachad féin lín a sluaig agus a sochraide ina gcoinne agus ina gcomdail gonuige sin. agus gér b’é Mac Uilliam, do tinóil a tromsluag agus táinic leo in lá sin go hArd raithen; agus do gluaisedh isin ló chédna leisín gClárach go hisdad críchfairsing clármachairech caomsrothach cochallmaigrech caislén ghrednach clogbinnghlórach coitchinnlínmar celloiregda Cuinnche. do an in oidche sin i náirdchill uasaláibinn aiffrendghnáthaig Fhingín; SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p. 140

327 agus do gluais mochtráth arna mórach isin (...) uachtaraig, agus í mbél coradh nemechréide niamabhnige nertborbsrothaige Néill” SÉAN MAC RUAIDHRÍ MAC CRAITH, **Caithréim Thoirdhealbhaigh**, London: Irish Texts Society, 1929, p. 140

1277	Kilrush - Tromrah	20
1277	Tromrah - Caherballykinvarga	32
1314	Fidhail - Tullyodea	13,9
1317	Ruan – Macaburren’s Causeway	4,2 or 12,8
1318	Thomond Bridge (Limerick) - Tulla	33,1
1318	Bunratty – Quin (via Kilnasoolagh)	20
1318	Quin - Aughrim	16,7

Table 1: Distances traversed by armies in a single day according to the CT

Are these numbers reliable? Based on other estimates of rates of march in the Pre-Industrial period, the answer seems to be yes. Drawing upon a substantial body of historiography, Martin Gravel lists a number of estimates that pinpoint the average travel speed for large parties in the Carolingian Empire at around 20-35km/day.³²⁸ Bernard S. Bachrach argued that mounted troops that did not expect to engage an enemy could cover around 50km/day and as much as 75km/day “under very pressing circumstances”.³²⁹ However, mounted troops that expected to be able to fight at all times could cover no more than 30km/day.³³⁰ Armies encumbered by wagons were much slower, as oxen-drawn carts could traverse 15km/day “on the best conditions” and horse or mule-driven ones twice that distance.³³¹ Herds, according to Yuval Harari, were comparably as fast as the quickest vehicles, covering 20-30km/day.³³² Based on data from late-medieval English sources, James Masschaele arrived at more generous estimates, although he noticed the numbers varied greatly based on topography, condition of the roads and time of year.³³³ Traffic of horse-drawn carts in Essex covered between 10 and 14 miles/day (c. 16-22.4km/day), while those in Northamptonshire made an average of 22 miles/day (c.35.2km/day).³³⁴ Masschaele, however, relied on “crow flight” estimates, calculating distances as straight lines between

328 GRAVEL, M. **Distances, rencontres, communications: Les défis de la concorde dans l’Empire carolingien**. PhD Thesis: Université de Montréal/Université de Paris 1 Panthéon-Sorbonne, 2010, p.208 and works cited therein.

329 BACHRACH, B.S. **Animals and Warfare in Early Medieval Europe**. *In: Animals and Warfare in Early Medieval Europe*. London: Variorum, 1993, pp. 717-718, specifically note 46

330 BACHRACH, Bernard S., **Animals and Warfare in Early Medieval Europe**, *in: Animals and Warfare in Early Medieval Europe*, London: Variorum, 1993, p. 718.

331 *Ibid.*, p. 717 and works cited therein.

332 HARARI, Y.N. Strategy and Supply in Fourteenth-Century Western European Invasions Campaigns. **The Journal of Medieval History**, v.64, n.2, 2000, p. 312

333 MASSCHAELE, James, Transport costs in medieval England1, **The Economic History Review**, v. 46, n. 2, p. 266–279, 1993, p. 270.

334 *Ibid.*

origin and destination points.³³⁵ The actual distances might have therefore been greater, as vehicles had to negotiate passage around obstacles and stick to paths that were not always straight. Subtracting the days of rest from Peter the Hermit and Godfrey de Bouillon marches to the Holy Land in the First Crusade, John Nesbitt calculated a rate of movement of 15,5 miles/day (c. 24,8km/day) for Godfrey's army and 17,7 miles/day (c. 28,3km/day) for Peter's.³³⁶ In an agent-based simulation of the Byzantine march to Manzikert in 1071 that accounted for logistics, environmental constraints and the actions of every soldier in the column, Philip Murgatroyd ascertained that a day's march of 15 miles/day (c. 24km/day) was "just within the limits of plausibility" for an army of 18101 agents.³³⁷

These estimates are remarkably consistent and suggest that the distances inferred from the CT were, at first sight, well within the capabilities of 13th and 14th century armies. This is even the case for the 38km march from Limerick to Clonroad, although, as the central incident that kicks off the narrative, it is likely this episode is a fruit of Mac Craith's imagination. It would have been more prudent for the actual de Clare-Geraldine army to rest at Bunratty before assaulting the Uí Bhriain *ceann áit*, for even if it would be feasible to walk that distance in a single day, it would be dangerous to engage in combat with tired soldiers. It is also possible that, contrary to Mac Craith's assertions, the English army assembled at Bunratty, with their allies coming in by boat – a less romantic start to his epic, but arguably safer and more efficient, especially if either the Clare or his Geraldine allies were drawing their warriors from elsewhere. Furthermore, the historiographical works quoted above make a point of stressing that these numbers are ideal figures; the actual distance covered in any specific day of march could vary drastically based. In this regard, river crossings were of particular importance.

As G.A. Hayes-McCoy points out, leaving a pathway into open country was always an "uncertain matter" that "could seldom have been attempted by marching armies".³³⁸ This contingency restricted movement to a limited number of passes, causeways and defiles, making troops vulnerable to ambushes.

The prospect of being caught flat-footed seems to have been a cause of great concern. Séan Mac Craith's description of the routine of an army after a day's march included keeping

335 *Ibid.*

336 NESBITT, J.W. The Rate of March of Crusading Armies in Europe: A Study and Comparison. *Traditio*, v.19, 1963, p. 173

337 MURGATROYD, P.S. *Medieval Warfare on the Grid*. PhD Thesis: University of Birmingham, Birmingham, 2012, p.216

338 HAYES-MCCOY, *Irish Battles*, p. 36.

watch at fords as well as “gaps of danger” (*mbernadaib beogail*) around the camp.³³⁹ Those causeways and passes were a necessary evil, but they were also predictable, and astute commanders could anticipate the movements of their opponents by holding these chokepoints and forcing them into battle. This was the case of the first stages of the battle of Dysert O’Dea in 1318. After losing a ford to Richard de Clare, Conchobhar Ó Dheadhaigh fought on the retreat until a second ford, from which he sprung an ambush upon his men.³⁴⁰

A passage from the Annals of Connacht gives an example of the difficulties even a well-established ford could pose. In 1244, Feidhlim Ó Conchobhair attempted to cross the Yellow River (In Irish, *An Gheirgthigh*) at Áth na Cuirre (“Ford of the [River] Angle”). Unfortunately,

The waves were overflowing their banks, and they could not proceed across, so they made to the hospital house of St. John Baptist, which was situated by the ford, tore it apart and threw it over the river for the army to go through.³⁴¹

If no suitable bridge or causeway could be arranged, or the crossing was deemed too dangerous – for example, due to the proximity of an enemy force – the whole campaign could be driven to a standstill. Thus in 1315, during the Bruce War, we hear that Richard de Burgh and the Scottish army set camp at opposite sides of the river Bann, near Coleraine, and were unable to engage because the waters were too deep.³⁴²

339 “do anatar sin isdad uasal áirdchille sin in oidche sin, agus do aithnigetar dá noirechtaib feithme agus faireda do dénam ar a mbernadaib beogail, agus ar áthaib coitchenna na cóigcríche, agus na conaireda [doi choiméd], agus beith go fuirech feithmech fuirechair do frestal na ruathar agus na robhad agus na rodchogad sin”, O’GRADY (Org.) **Caithréim Thoirdealbhaigh**, p. 138.

340 “Dob é fregrad in Chláraig, ná tabarfadh síth ná cóir ar bith do’n dul sin dó féin ná do nech eile dá raibe ina naimdib bunaid aige féin agus agá cháirdib riam roime. agus ar bfaighbáil na ndrochscél sin do Chonchobar O Degaid, chuires cruinniugad ar a degmuinntir do gach leith agus nochtas fregrad in Chláraig dóib; agus dognít luathcomairle ar in imnid sin, agus is é ní ar a dtángatar.i. urmór a ndegfer do chur i gceilg ar a gcúl a hamarc sluaig in Chláraig, agus áth in imbuailte do chosnam do dín a grech go techt d’Feidlimid agus do degLochlainn O hAichir dá bfurtacht. agus chuires techta doridise dá ninnsaigid le fregrad in Chláraig air féin, innus gomad móide a dtinnenas é.” *Ibid.*, p. 142.

341 “Do imthig in slua asin bali amach iar sin & do len in comarba iat co hAth na Curri forsín Gerctig, & do bai an tuili dar bruigib di & ní rancatar tarsi co ndernsad tech spitel Iohannis Basti do bai ind imbel ind atha do scailed da cur forsán abaind do dol tarsi don tsluaig.” ANNALS OF CONNACHT 1244.5. FREEMAN, M.(ed.) **Annála Connacht: The Annals of Connacht**. Dublin: DIAS, 1944, pp. 80-82 (Author’s translation).

342 “Imtusa Etuard cona fhedain, tre fhurail h. Neill & Ulad arcena do gluais remii arabarach ar uidedaib imthechta co Cul Rathain fo thuaid & co horer Indsie Eogain & ro leagsat droichet Cula Rathain re hadaig an Iarla, & lenais int Iarla iat & gabais longport a Cul Rathain ar inchib Ulad & Edubart imon abaind, conar facaibset diblinaib coill na machaire na gort na gemur na sosad na saball na cill cin dod & cin loscad. Uair nirbo comsich cummaiscc no cathaigti na sluaig-sin re ’roili, oir do bi an Banna bruthmur borbdomain oca n-etrain; acht aenni, do bitis debtha dermara eturro adiu & anall imon abaind cech lai.” ANNALS OF 110

It is not surprising, therefore, that the number of river crossings (mentioned) in the *CT* was relatively small, and many of them (Clonroad, Bunratty, Quin, Thomond Bridge) were situated next to major settlements. Of the others, four – Corofin (*Cora Finne*), Macaburren’s Causeway (*Cara mic Amboirend*), Achrim (*Cara Echdroma* or *Bél Coradh Néill*) and Kilnasoolagh (*Cora Cille Subalaig*) have in their original names the Irish word *cora*, meaning “weir” or “stone ridge”. This suggest that they possessed, if not a bridge, at least some sort of man-made improvement to regulate water flow – and, possibly, avoid botched crossings such as those described by the Annals of Connacht.

2.6. Model

This section will explain how the narrative outlined above will be implemented as a conceptual model. In the following pages, whenever an explanation specifically mentions a ThomondSim procedure or variable, its name will be rendered in a different font (ex. `provisions`). Otherwise, it is meant to refer to a general element of the model that may be implemented differently in the ABM (e.g., subdivided into many sub-procedures).

The map in Figure 22 is a compilation of the physical and political features of Thomond outlined throughout this chapter. Rather than incorporating them into the model as a historical GIS, I have decided to represent the environment of ThomondSim as a network. This virtual “Thomond”, therefore, became a set of 165 nodes connected by two types of link: “routes” (representing pathways) and “tracts” (open territory without routes of military importance). (Fig. 22) The same model is used in *The Triumphs of Turlough*, in which each node correspond to a hexagon in the game’s grid. These nodes will be implemented as a kind of agent as “turtles” in Netlogo jargon– a call-back to NetLogo’s precursor language, Logo, originally created as a children-friendly programming tool that allowed users to direct movements of a tortoise. In ThomondSim’s interface, the resulting network model will be hidden behind a map, in which each node is represented by a hexagon in a grid (fig 24). This same map is the basis for game board of *The Triumphs of Turlough*.

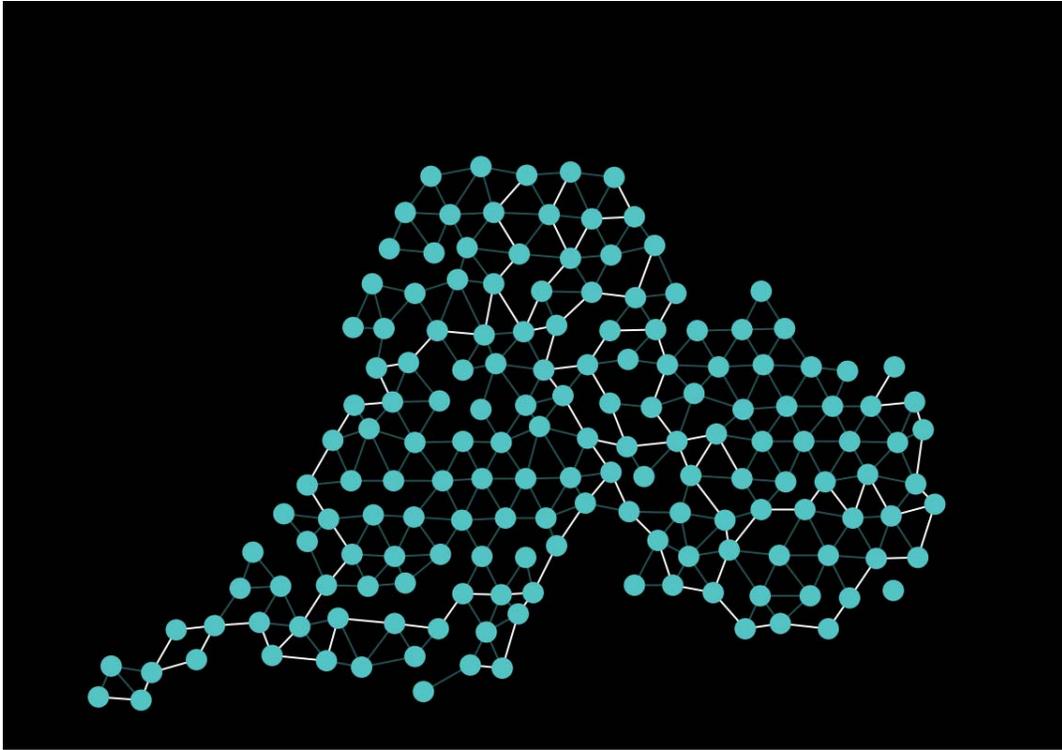


Figure 23: The underlying network of ThomondSim



Figure 24: ThomondSim’s background map and hex grid. Artwork by Gabriel Cordeiro.

While this choice might seem at first counterintuitive given the availability of spatial data, it is actually more convenient for both ThomondSim and *The Triumphs of Turlough* in a number of ways.

First, modeling the environment as a network makes it relatively straightforward to implement least cost algorithms, formulas that calculate the easiest – i.e. less ‘costly’ – path between two nodes. NetLogo’s Nw extension, an add-on with features for social network analysis, allows for least cost calculations with procedures such as `nw: weighted-distance-to`, `nw: weighted-path-to`, and `nw: turtles-on-weighted-path-to`. This is done by giving each link segment a “weight” rating and asking agents to favor “lighter” paths over “heavier” ones. In the case of ThomondSim, routes have a `difficulty` rating of one whereas tracts have a `difficulty` of two. Everytime agents move from one node to another, they subtract the `difficulty` of the respective link from their `move-points` reserve, an abstract measure of the maximum distance a moving party could traverse in a single day’s march. Each mobile agent starts the expedition phase³⁴³ with six `move-points`, which equals, in the model’s scale, to circa 26km/day. Furthermore, to allow agents to target other mobile agents (and, concomitantly, be targeted by them), I have created two additional links breeds: connections and locations. The former bond the agent to its goal, allowing it to store information about who or what it is currently targeting. The latter “tie” agents and settlements to the nodes they are currently occupying, turning them into part of the network. All connections have a `difficulty` of 1000 so that agents are never tempted to use them as part of the network. Conversely, locations have a difficulty of 0 in most situations, so that they do not interfere with the least-cost algorithm. The sole exception is when more than one mobile agent happen to occupy the same node, in which case the `difficulty` of their location is temporarily raised to 1000. This is to prevent a bug in which they interpret each other’s locations as “shortcuts” and become unable to leave a node, as the cost to “move” across locations (0) is lower than across routes or tracts (1 or 2).

343 See Chapter 3.6, “Model”, “Model Schedule”, below
113

The code snippet in fig. 25, – taken from the model’s `move` procedure – illustrates the principle in action:

```
ask one-of nodes-on patch-here [ set path but-first nw:turtles-on-weighted-path-to target difficulty ]
ifelse [ patch-here ] of target != [ patch-here ] of self
[
  face first path
  ask nodes-on patch-here [ set move-cost nw:weighted-distance-to first path difficulty show move-cost ]
  set move-points move-points - [ move-cost ] of one-of nodes-on patch-here
  wait 0.3
  move-to first path
  ask my-locations [ die ]
  create-location-with one-of nodes-on patch-here [ set difficulty 0 set hidden? true ]
  if any? ( turtle-set ( other rithe-on this-place ) ( other magnates-on this-place ) )
  [
    ask ( turtle-set ( other rithe-on this-place ) ( other magnates-on this-place ) )
    [
      ask my-locations
      [
        set difficulty 0
      ]
    ]
  ]
]
```

Figure 25: Snippet from ThomondSim’s code tab, showing a segment of the move procedure

As far as models of human movement across landscapes go, this is a very abstract solution for a very complex phenomenon. In their own investigation on routeways around boglands in ancient Ireland, Yolande O’Brien and Stefan Bergh opted to combine a least cost algorithm with an ABM of movement itself.³⁴⁴ According to its procedures, agents would apprehend the environment around them in order to choose and create their own routes based on terrain type, slope, field of vision, communication with other agents and dead reckoning.³⁴⁵ While the results of such a combined approach are likely more faithful of real-life behavior, a network model can be much more easily converted into a scholarly board game, where the calculations need to be simple enough to be undertaken by players in no more than a couple of minutes. Furthermore, the data I am relying on is already greatly simplified. As the previous sections have shown, for example, the woodlands and bogs are generalized to the level of the townlands. In this context, the rules for pathfinding do not need to be very precise, as fine variations in course would be lost in the model’s scale. Lastly, representing space as network is an effective (if not the only) way to avoid the interpretive pitfalls outlined in the beginning of this chapter: true to Scott’s theory of power, it allows us

344 O’BRIEN, Yolande; BERGH, Stefan, Modelling Routeways in a Landscape of Esker and Bog, *in: Simulating prehistoric and ancient worlds*, Cham: Springer, 2016, p. 199–218.

345 Dead reckoning is a navigational technique in which one’s location is estimated based on their distance to a landmark or otherwise known fixed location. Cf. *Ibid.*, p. 205.

to perceive political entities as channels through which authority flows, rather than uniform tracts of land.

Settlements and kingdoms

There are three kinds of settlements in the ThomondSim and *The Triumphs of Turlough: monasteries, castles, and longphoirt*. In ThomondSim, they will be implemented as turtles.³⁴⁶ In *The Triumphs of Turlough*, they will be represented by settlements drawn on the game map. Their design was inspired by the Gough Map, a *circa* 1360 chart that depicts the British Isles.

Monasteries represent major ecclesiastical settlements and their surrounding termon lands. During the expedition phase, an agent needs to end their movement in a node with a monastery in order to resupply; setting up camp out in the open will force it to spend cattle and provisions. Monasteries can also be raided for cattle. They are represented by a chess bishop in ThomondSim.

Due to the level of abstraction of the model, the distribution of monasteries in the ABM/board game environment does not match historical settlements on a 1:1 scale. I started with a list of 75 parish churches and other monasteries of some influence based on previous surveys of the ecclesiastical landscape of Thomond.³⁴⁷ I subsequently simplified the resulting map, merging together churches that fell within the same node of the network. To ensure that a node did not contain more than one kind of settlement in it – which would complicate both the code and the game rules – I erased monasteries from nodes in which a secular settlement belonging to that same faction already existed.

Longphoirt represent the *ceann áiteanna* of major secular lineages. They represent the starting location of Irish agents, as well as the resources at their disposal. If a *longport* is destroyed, the agent who controls it is unable to wage war. They are represented as chess kings in ThomondSim.

346 WILENSKY, Uri; RAND, William, **An Introduction to Agent-Based Modeling**, Cambridge/ London: The MIT Press, 2015, p. 6–7.

347 NUGENT, Patrick, The Dynamics of Parish Formation in High Medieval and Late Medieval Clare, in: FITZPATRICK, Elizabeth; GILLESPIE, Raymond (Orgs.), **The Parish in Medieval and Early Modern Ireland**, Dublin: Four Court Press, 2005, p. 186–208; MCINERNEY, **Clerical and Learned Lineages of Medieval Co. Clare**.

Castles are fortifications built by the English. They add a number of penalties to enemy agents passing through or taking actions in nodes where they are located. First, they add a bonus to combat rolls that take place in their node if a magnate agent is present. Second, they subtract provisions and cattle from enemy agents that enter their node. Third, need to be assaulted in order to be raided. Assaults work just like combat rolls, which will be explained in section 3.6, below.

There are two castles in the model, representing the fortresses that were operational during the 1276-1318 wars in Thomond. Bunratty, *caput* of the manor of the same name, shares the function of a *longport*: it is the starting location of magnate agents and must be protected in order for its owner to participate in war. Quin, on the other hand, can only be interacted with via raiding or resupplying. It is only active in the post-1280 scenarii, the date after which it was built. They are represented by chess rooks in ThomondSim.

Eight of the *longphoirt* on the map (Clonroad, Tulla, Dysert O’Dea, Caherballykinvarga, Kildysart, Inchiquin, Gregans, and Dubh Glen) are based on the historical location of known or implied *ceann áiteanna*. Unfortunately, our knowledge of the eastern portion of Thomond prior to mid-14th century is much less reliable. During the 1276-1318 war, this region was a cluster of petty kingdoms known as *trícha cét Uí mBlóid*. Most of these *túatha* were sidelined by the Mic Conmara of Clann Chúillen, allies of Clann Taidhg, after Clann Brian Ruad’s defeat in 1318. The Mic Conmara’s expansion and aggressive incastellation in the next two centuries modified the local political landscape to such a degree that is not easy to piece together the balance of power between kingdoms within *trícha cét Uí mBlóid*, or the location of their *longphoirt*. To account for this omission, I have amalgamated them, I have amalgamated them into a single faction called “Uí mBlóid”, and situated their *ceann áit* at Ogonneloe, a parish that corresponded to one of its constituent kingdoms and where a *longport* of its ruling lineage, the Uí Duibhraic, may have existed.

The *longphoirt* of Kildysart (kingdom of Corcabhaiscinn) and “Dubh Glen” (mentioned as a stronghold of Clann Brian Ruadh in 1318) are alluded to in the CT, but we have no way of knowing if they were really *ceann áiteanna* – notably, “Dubh Glen” is not even the name of the residence, but rather the general area in which it was located.³⁴⁸ Finally, I decided to omit one of the kingdoms (Uí Cormaic) altogether, as I could find no evidence of the location of any of their *longphoirt*.

348 “*agus ar dlúithbruachlargaib Duibglenna do sáiledar na sluaigh sin snaidmcathcumasg na sluaghnamad dá saighidh ar slesaib daingengharba a ndúthaighi agus Duibglenda, agus ní uaratar imresain san inadh sin.*” O’GRADY (Org.), *Caithréim Thoirdealbhaigh*, p. 99.

One could argue – quite fairly – that this simplification undercuts the very argument made earlier about the differences between *longphoirt* and castles – namely, that unlike English strongholds and manorial centres, Irish kingdoms had no single capital centre, and kings were even known to destroy their own holdings on purpose. A more accurate model would account for this dynamic, including several *longphoirt* for each faction, not to mention some sort of fog of war to prevent agents from knowing exactly in which fortress their enemies were located. Unfortunately, given the paucity of evidence available, the only way to implement such a model would be by adding fictional or speculative *longphoirt* according to some sort of theoretical guesswork. In light of this limitation, I decided to err on the side of the evidence I have available, and represent only the *longphoirt* of which we have reasonable evidence of their overall location. The best I can do defend such choice is to ask the reader to interpret each *longport* as a abstract representation of all the buildings and facilities in a kingdom’s capital set, as well as neighbouring sites of some importance. Hopefully, future feedback from experts in the topography of Co. Clare as well as advancements in local history will allow me – or others - to rework and improve the model.

Node attributes

Attack-modifier and **defender-modifier**: These are penalties added to combat rolls every time an agent engages another in the node. The existence of woodland, peat bogs and/or river crossings are the factors that determine the modifiers of a given node. These penalties are cumulative: a node in which there are woods, mires or river crossings will inflict penalties from all three terrain types at once. Table 2 gives the relation of penalties and terrain types:

Terrain condition	Role	penalty
Bog	Attacker	-1
Forest	Defender	1
Water crossing	Defender	1

Table 2: Terrain types and effects in ThomondSim/The Triumphs of Turlough

Although woods and bogs also had an effect on the rate of march of moving parties, this property is not being considered here. The **difficulty** rating of a route or tract is the only

variable taken in account for these calculations. In other words, ThomondSim does not recognize a difference between traversing an open field, mountain, or peat mire.

While this simplification unquestionably reduces the model's fidelity, it was necessary to ensure the viability of *The Triumphs of Turlough* as a board game. Early tests revealed that players needed several minutes (and the help of a calculator) to manually calculate terrain and relief effects. This would undermine *The Triumphs of Turlough* very reason of being as a tool for citizen science.³⁴⁹

Move-cost: numerical representation of how difficult (or “costly”) moving between two nodes is. The property is calculated based on the origin of the agent, and whether the initial and current nodes are connected by a route (less difficulty) or a tract (more difficulty). In *The Triumphs of Turlough*, players calculate it manually every time they move.

Settlement attributes

integrity is an inverse measure of a settlement's devastation, from 10 (whole) to 0 (wasted). It can be lowered by military actions or by some types of disaster events, and replenishes at the beginning of every round at a rate of 1 per round. In *The Triumphs of Turlough*, **integrity** is instead represented by an attribute called *devastation*, ranging from 0 (whole) to 10 (completely destroyed). The purpose of this difference is, on the one hand, to facilitate its implementation in ThomondSim, avoiding a bug in which calculations would result in a division by zero. On the other hand, it also makes it easier to set up the game in *The Triumphs of Turlough*. Rather than adding integrity tokens to each of the 165 hexes in the board and keeping tabs on each resulting stack, players only have to account for the devastation suffered.

Destroyed? Is a Boolean variable set to **true** when a settlement's integrity reaches 0. Destroyed settlements take an extra turn to start replenishing their integrity again. In *The Triumphs of Turlough*, destruction is represented by flipping a settlement's *devastation* token stack once it reaches 10. The stack is returned to its original position in the following round, and will start replenishing again from that point on.

loyalty indicates which side of the civil war the settlement's holder is currently supporting (if any). In ThomondSim, this attribute exists in three states: 2 (Clann Taidhg), 1

³⁴⁹ See Chapter 4, below, for more on that point.

(Clann Briain Ruaid) or 0 (currently non-aligned). Although settlements cannot be conquered, their loyalty may change if their holder is forced or persuaded to change sides.³⁵⁰ In ThomondSim, settlements are colored by their loyalties, so the model's user can easily make sense of the current political standoff (fig. 25)

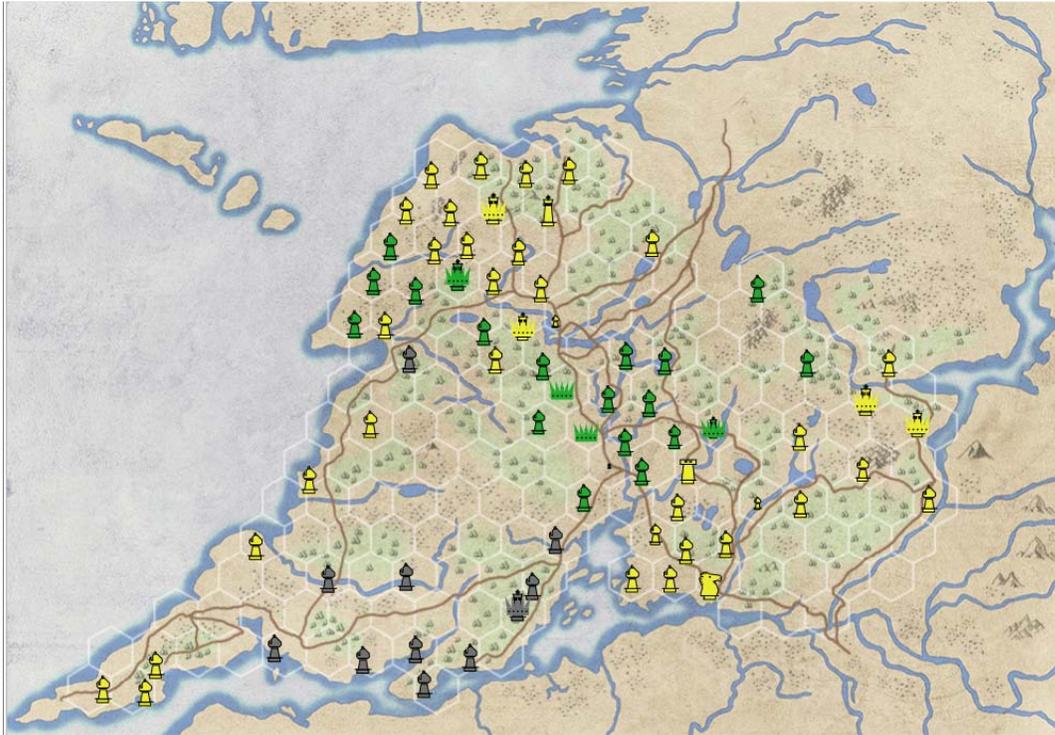


Figure 26: Settlements in ThomondSim. Green means allegiance to Clann Taidhg; Yellow, to Clann Briain Ruaid. Non-aligned settlements are colored gray.

Political boundaries

There are no political boundaries of any sort in ThomondSim. Rather, political divisions are represented by patterns of control of the settlements themselves. For the purposes of the model, therefore, an Irish kingdom or English lordship, therefore, is no more than the sum of its constituent holdings.

The “ownership” of a given settlement is not represented as an attribute itself, but rather by a link breed called controls, that connect settlements to mobile agents (both represented by

350 See Chapter 3, below.

turtles). These links are used by the agents in question to give commands to their settlements (e.g. by asking them to switch their loyalty or adopting their color). A second link breed, provenances, works just like controls, except that it connects an agent to its capital settlement. Provenances are used in procedures that require agents to return to their bases after demobilizing.

In *The Triumphs of Turlough* (Fig.26), these boundaries are represented by settlements of different colors. The players manually keep tab of their faction's loyalty.



Figure 26: *The Triumphs of Turlough's* game board. Art by Gabriel Cordeiro, inspired by the Gough Map (c. 1360).³⁵¹

351 Bodleian Library Ms Gough Gen. Top. 16. Digital facsimile available at: <<https://digital.bodleian.ox.ac.uk/objects/e4dc07a6-3ec8-414a-aa92-2e9815f93276/>> (Access Date: 27 Jan. 2022).

Chapter 3

The agents

Ireland in the 13th and 14th centuries was a space ruled by elites of different origins, whose power stemmed from and circulated through different institutions, and was exercised in different – albeit constantly intermingling – practices. “The two edges of the continuum”, wrote Patrick J. Duffy, “are fairly clear-cut”.³⁵² On the one hand, there was the English colony of Dublin and the territories in the eastern Irish coast, endowed with governmental institutions modeled after English ones and surrounded by a hinterland of lordships controlled by English or English-descended magnates. On the other, there were the few remaining autonomous chiefdoms of Gaelic Ireland, possessing distinctively Irish systems of government, taxation, and military organization. Between these edges, however, lay what James Lydon, inspired by the ideas of Frederick Jackson Turner, called a frontier: a hybrid, ambiguous zone in which “an essentially tribal society which was on the brink of breaking free from [its] archaic social and political system” met, transformed and was transformed by “a feudal society which was politically more sophisticated and militarily more advanced”.³⁵³

Ideas of English sophistication and Gaelic backwardness enthral fewer historians nowadays than they did over fifty years ago, when Lydon’s seminal paper first saw the light of day. Nevertheless, the author’s contribution proved to have an enduring impact on the historiography. It invited us to think about the relationships between the English Crown, its magnates and the old Irish elite in terms of a “combination of legal and institutional rigidity” with a “practical flexibility in matters [such as] military tactics and alliances”, and about the English Lordship of Ireland itself as “both a living idea and an evolving political framework”.³⁵⁴

352 DUFFY, Patrick J., The Nature of the Medieval Frontier in Ireland, **Studia Hibernica**, n. 22/23, p. 21–38, 1982, p. 21.

353 LYDON, James, The problem of the frontier in medieval Ireland, *in*: CROOKS, Peter (Org.), **Government, War and Society in Medieval Ireland: Essays by Edmund Curtis, A.J. Otway-Ruthven and James Lydon**, Dublin ; Portland, OR: Four Courts Press Ltd, 2009, p. 317.

354 FRAME, Robin, Ireland after 1169: Barriers to Acculturation on an ‘English’ Edge, *in*: STRINGER, Keith J.; JOTISCHKY, Andrew (Orgs.), **Norman Expansion: Connections, Continuities and Contrasts**, 1st edition. Farnham, Surrey ; Burlington, VT: Routledge, 2013, p. 141., CROOKS, Peter, The Structure of Politics in Theory and Practice, 1210-1541, *in*: SMITH, Brendan; BARTLETT, Thomas (Orgs.), **The Cambridge History of Ireland: Volume 1, 600–1550**, Cambridge ; New York, NY: Cambridge University Press, 2018, p. 466.

Far from the reach of Dublin, barely settled by the English prior to the late 13th century, Thomond is an example of a space in which one such “frontier” existed. On the one hand, local kings – the Uí Bhriain and their vassals – struggled to hold on to their kingdoms in face of external ambitions. On the other, a lineage of English magnates – the de Clares – attempted to establish a lordship with little financial or military help from the central government. During the nearly forty years that separated the de Clares’ arrival (1276) and their ultimate defeat in battle (1318), the exchanges between these groups were so considerable that Aoife Nic Ghiollamhaith described the elite of Thomond as a stratum “more united by its common military culture than it was divided by its ethnic origins.”³⁵⁵ The purpose of this chapter is to illuminate the political, military and economic practices of these elites, and the nature of their exchanges.

3.1. Irish kings

Ríthe and cenéla

“Ireland [...] remained a land of many kings, and of a hierarchy of kings”.³⁵⁶ In this words Ronan Mulhaire described the political landscape of the Gaelic world at the time of the English Invasion, terms that fit the following centuries just as well. Ireland in the 13th and 14th centuries was a patchwork of provincial kingdoms– known in Irish as *túatha* – whose leaders exerted authority over an even larger number of smaller chiefdoms. These kings were most commonly known as *ríthe* (sg. *rí*), a word often translated as *rex* or *regulus*, but were also, at times, referred to as *tigherna* (“lord”), *toisech* (“first”, “principal”) and *ard-rí* (“high-king”), as well as Latin terms such as *duces* and *capitaneus*.³⁵⁷ These chiefs belonged to a secular aristocracy known collectively as *uaisle* (sg. *uasal*, literally “noble”) or sometimes

355 NIC GHIOLLAMHAITH, Aoife, Kings and Vassals in Later Medieval Ireland: The Uí Bhriain and the MicConmara in the Fourteenth Century, in: BARRY, Terry; FRAME, Robin; SIMMS, Katherine (Orgs.), **Colony and Frontier in Medieval Ireland**, London and Rio Grande: The Hambledon Press, 1995, p. 216.

356 MULHAIRE, Ronan, **Kingship, lordship, and resistance: a study of power in eleventh- and twelfth-century Ireland**, Thesis, Trinity College Dublin. School of Histories & Humanities. Discipline of History, 2020, p. 146.

357 For a discussion of the usage of the terms, see *Ibid.*, p. 105–18.

oireacht, a polysemic word that, in other contexts, could also mean an assembly, the assembled military levies of a territory or the territory itself.³⁵⁸

The relationship between an overking and his subkings had its roots in the institution of clientship and in the widespread economic reliance on livestock that characterized Early Medieval Irish society. Pastoral societies, argued D. Blair Gibson, require “a continuous state of military vigilance” against cattle raids, as well as institutional mechanisms to counteract the loss of animals due to disease, drought, and other natural disasters. Less privileged strata would therefore forge clientship agreements with the military elite, offering tributes and other dues in exchange of protection for their herds.³⁵⁹ In time, these bonds would crystallize into social practices mediated by non-market exchanges of livestock and in the preponderance of cattle raiding as a means of acquiring prestige and wealth.³⁶⁰

By the High Middle Ages, however, the economic foundations of Gaelic Ireland had changed, and so had the terms with which its elite came to conceptualize itself. As early as the 7th or 8th century, according to Katherine Simms, Ireland observed a shift towards a “Continental model of kingship” characterized by the ordaining of kings by ecclesiastics, issuing of charters, participation in Church synods, reliance on royal agents and claims of territorial ownership of their domains.³⁶¹ Mulhaire argues that Irish kings in the 11th century started to envision their power along imperial lines, borrowing ideas and vocabulary formerly employed by the Carolingians, the kings of England, and the Ottonians of the Holy Roman Empire.³⁶² The advent of more robust fortifications and the appearance of Irish words derived from the Latin *castellum* –such as *castéil*, *cáislén* and *caisdeol* – led some archaeologists to surmise that Gaelic kingdoms were undergoing political changes alongside broader European lines – or, at the very least, an “attract[ion] to new, fashionable or boastful words”.³⁶³ Paul Mac Cotter goes as far as stating that lesser Irish kings of the 12th century held land of their overkings according to a “*de facto* tenurial relationship” “in an almost feudal sense”.³⁶⁴

358 Airecht, in: **eDIL: An Electronic Dictionary of the Irish Language, based on the Contributions to a Dictionary of the Irish Language (Dublin: Royal Irish Academy, 1913-1976)**, [s.l.: s.n.], 2013 Available at: <dil.ie/1904> (Access Date 04/11/2020).

359 GIBSON, **From Chieftdom to State in Early Ireland**, Agropastoralism and the Primitive Irish State, paras 5-6.

360 MCCORMICK, Finbar, Exchange of Livestock in Early Christian Ireland, AD 150-1150, **Anthropozoologica**, n. 16, p. 31–36, 1992, p. 35.

361 SIMMS, Katherine, **From Kings to Warlords**, Woodbridge: The Boydell Press, 1987, p. 11.

362 MULHAIRE, **Kingship, lordship, and resistance**, p. 118–142.

363 MCNEILL, **Castles in Ireland**, p. 9; MULHAIRE, **Kingship, lordship, and resistance**, p. 78–82.

364 MACCOTTER, **Medieval Ireland**, p. 49.

As similar as Irish *ríthe* may have become to secular elites in Britain and the Continent, they also retained important differences – as did the political system of which they were part. The most visible of these is the nature of the kinship groups that constituted the corporate unity of Irish society. The naming of these groups springs from terms that denote descendancy, such as *Uí* (the plural of “Ua”, meaning “grandson” or “male descendant”, often anglicized as “Hy”), *Cenél* (“kindred”), *Muintir* (“family”, “household” or “community of people”), *Dál* (“part” or “share”), *Síl* (“seed”), *Corca* (“oats”, as synecdoche for “seed”) or simply *Clann* (“offspring”). In time, the names of the kinship groups would pass on to their kingdoms as well, although, unhelpfully to the modern reader, chiefdoms would often keep their ancient name even after their original founders were gone or displaced.

In Thomond, the most powerful of these groups were the *Uí Bhriain*, descendants of Brian Bóruimhe († 1014), who ruled over the entire chiefdom. To the immediate east of their *ceann áit* at Clonroad, lay the *Mic Conmara* of *Uí Caisín*, whose kingdom in this period was also known as *Clann Chúillen*. The *Mic Conmara* were responsible for inaugurating the new kings of Thomond and would grow to become the most powerful subkings in the region after 1318, surpassing, in sheer power, even the *Uí Bhriain* themselves.³⁶⁵ The CT follows the politics of *Clann Chúillen* closer than that of any other subkingdom, which led some to theorize that the document may have been partly based on a previous *Mic Conmara*-sponsored text.³⁶⁶

To the northeast of *Clann Chúillen*, in the present parishes of Moynoe, Tuamgraney Inishcaltra and Clonrush, lay the *Uí Ghráda* of *Cenél Dunghaile*, a lineage with which the *Mic Conmara* would be frequently in conflict during the wars of 1276-1318. South of this chiefdom was *trícha cét Uí mBloid*, a collection of small kingdoms that included the *Uí Echthighern* of *Uí Cearnaigh*, the *Uí Seancháin* of *Uí Ronghaile*, the *Uí Cinneidigh* of *Gleann Orma* and the *Uí Diubhraic* of *Uí Conghaile*. *Uí mBloid* also included the territories of *Uí Floinn* and *Uí Thoirdealbhaigh* – the ancestral chiefdom of the *Uí Bhriain* before they took the name of Brian Bóruimhe. Some of these lineages – like the *Uí Cinneidigh* – also had branches on the east side of the Shannon, and would be permanently relocated there after 1318, after siding with the losing side in the war between the *Uí Bhriain*. Because of its distinctive political fragmentation, *Uí mBloid* was known as *trícha na dtaoiseach* (“*trícha* [cét] of the chiefs”), and seemed to have acted as a single alliance, almost always taking the same side in military conflicts.

365 NIC GHIOLLAMHAITH, *Kings and Vassals in Later Medieval Ireland: The Uí Bhriain and the MicConmara in the Fourteenth Century*, p. 202.

366 *Ibid.*, p. 208.

On the other side of the Fergus river were situated three other subkingdoms, the Uí hAichir of Uí Cormaic, the Uí Dheaghaidh of Cenél Fermaic and the Mic Mathgamhna of Corcabhaiscinn. The latter were closely related to the Uí Bhriain, being the descendants of Mathgamain Ua Briain, a grandson of Brian Bóruimhe who expanded over Corcabhaichin in the 12th century. Cadet branches of the Uí Bhriain also ruled Uí Bhréacain and Ára, off the coast of Galway.

Lastly, to the northwest of Thomond lay the Uí Conchobhair of Corcamruad and the Uí Lochlainn of Boireann. These lineages were technically autonomous, but they were constantly subjected to Uí Bhriain and frequently joined in (or were dragged into) their wars.³⁶⁷

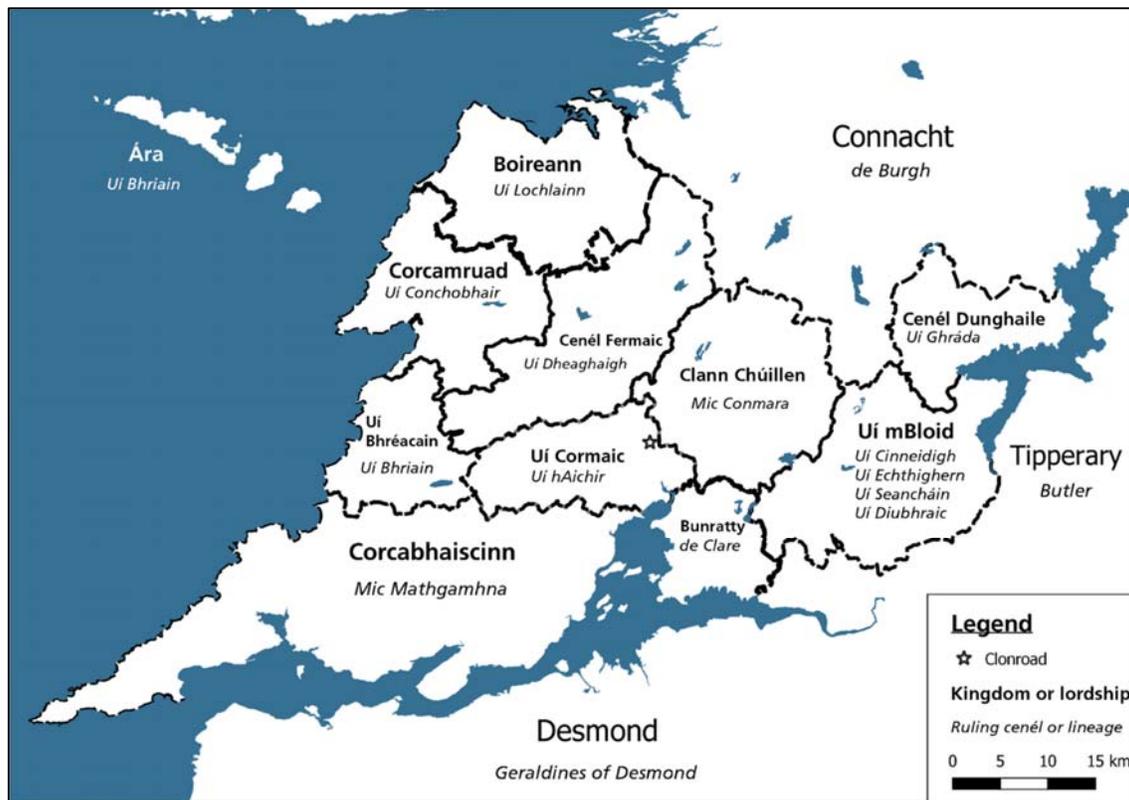


Figure 27: The political divisions of Thomond during the wars of 1276-1318

As their very names illustrate, Irish kinship groups bear a semantic similarity to the “clans” most commonly associated with medieval Scotland. Interestingly, given that the word

³⁶⁷ GIBSON, *From Chieftom to State in Early Ireland*, p. 206.

clan itself has an Irish origin (*clann*), the term itself is seldom used by historians of medieval Ireland. This hesitation may be, at least in part, derived from the distinctive meaning the concept has taken in the field of anthropology, which defines it as “a unilineal kinship group of people claiming common ancestry and heritage”.³⁶⁸ While the kinship units of medieval Ireland do fit this definition, the concept is still too broad for a blanket definition. When the CT refers to Clann Tadhg and Clann Brian Ruad as the protagonists of the power struggle for the kingdom of Thomond between 1276 and 1318, it means something more specific than the presumed descendants of Brían Bóruí mhe– the Uí Bhriain, of which both Tadhg and Brian Ruad belonged – or the presumed descendants of the legendary Cormac Cas – the Dál gCais, which comprised not only the Uí Bhriain, but also Clann Chuiléin and the Uí mBlóid – all of which are “clans” according to the letter of the definition above. To avoid this ambiguity, many authors have adopted instead the concept of lineage: a “unilinear descent group [...] with a traceable common ancestor”.³⁶⁹ According to this usage, Clann Tadhg and Clann Brian Ruad are better described as a sub-lineage of the Uí Bhriain, who were a sub-lineage of the Dál gCais, and so forth.

Irish kinship groups, however, were more than a group of people united by ancestry. Kenneth Nicholls called attention to this particularity when he defined “clan” – a word he, by his own admission “ha[s] no hesitation in employing” – as “a unilateral (in the Irish case, patrilineal) descent group forming a definite corporate entity with political and legal functions”.³⁷⁰ Nicholls stresses this latter point, arguing that clans were, on a fundamental level, a feature of a society’s ‘politico-jural’ sphere rather than the social-familial one.³⁷¹ Rejecting the term clan altogether, Gibson – an anthropologist himself – strives for a similar nuance in describing the Irish kinship groups as ramage systems, “lineages bound together into a single structure through a belief in descent from a common original ancestor.”³⁷² The existence of such a structure is of paramount importance, as is the implicit notion of social

368 MORRIS, Mike, Clan, *in*: **Concise Dictionary of Social and Cultural Anthropology**, 1st edition. Malden, Mass. ; Oxford: Wiley-Blackwell, 2012, p. 38.

369 MORRIS, Mike, Lineage, *in*: **Concise Dictionary of Social and Cultural Anthropology**, 1st edition. Malden, Mass. ; Oxford: Wiley-Blackwell, 2012, p. 151.

370 NICHOLLS, Kenneth, **Gaelic and Gaelicised Ireland**, 2nd edition. [s.l.]: The Lilliput Press, 2012, 1. Introduction: The Background of late Medieval Ireland Ireland a Lineage Society, para 1.

371 *Ibid.*

372 GIBSON, **From Chiefdom to State in Early Ireland**, Chapter 1, Theoretical Considerations, The Chiefdom Level of Sociocultural Integration, para 4.

ranking by virtue of proximity to the main line of descent. The more distant an individual was, the lesser his position within the ramage.³⁷³

In the Irish language itself, the term most often used for these kindred groups was, “a group of male persons of common descent, the members of which were legally responsible for each other and had certain reciprocal obligations”³⁷⁴, also known as *cenél* or *sliocht*. Which and how many obligations a given individual was bound to depended on his proximity to his relatives. To that end, Irish society discriminated four subdivisions of the *fine*: the *gelfine* (descendants of a common grandfather), the *derbfine* (descendants of a common great-grandfather), the *iarfine* (descendants of a common great-great-grandfather) and *indfine* (descendants of a common great-great-great-grandfather).³⁷⁵ The more distantly related an individual was to a ruling *rí*, the less it would be bound by common obligations, or likely to reap special privileges. This was crucially important to one of the most distinctive features of Irish chiefdoms: the rules by which a king’s successor was chosen.

Succession

Unlike the system in vogue in England, the Irish means of choosing a successor was not based on the law of primogeniture, but on agnatic elective succession. New kings were elected from a number of qualified candidates, known as *rígdamna*, who boasted close proximity to the ruling chief. The exact criteria by which these rulers were chosen have generated much debate, but seem to have included seniority, personal competence, physical constitution, wealth, powerful alliances and the goodwill of one’s subkings.³⁷⁶ Defeated pretenders vied to topple their inaugurated rival, and violence was not only tolerated, but also encouraged. In Donncha Ó Córrain’s words, non-ruling segments harbored “a state of constant disaffection” and “had but one political aim: to overthrow the group in power and seize the kingship for themselves.”³⁷⁷ Not surprisingly, the Irish succession system has been

373 *Ibid.* GIBSON, From Chiefdom to State in Early Ireland, Chapter 1, Theoretical Considerations, The Chiefdom Level of Sociocultural Integration, para 4.

374 Fine, in: **eDIL: An Electronic Dictionary of the Irish Language, based on the Contributions to a Dictionary of the Irish Language (Dublin: Royal Irish Academy, 1913-1976)**, [s.l.: s.n.], 2019. Available at: <dil.ie/22114> (Access Date 19/01/2022)

375 *Ibid.* Available at: <dil.ie/22114> (Access Date 19/01/2022)

376 See WARNTJES, Immo, Regnal succession in early medieval Ireland, **Journal of Medieval History**, v. 30, n. 4, p. 377–410, 2004; JASKI, Bart, **Early Irish Kingship and Succession**, Four Courts. Dublin: Four Courts, 2000.

377 Ó CORRÁIN, Donncha, **Ireland Before the Normans**, Dublin/London: Gill and Macmillan, 1972, p. 39.

singled out, time and again, as one of the causes of the initial success of the English expansion in the late 12th and 13th centuries. Even Eoin MacNeill, who spared no energies in defending Gaelic Ireland against Anglocentric interpretations, conceded that the feudal law of primogeniture had “the advantage” over the Irish system.³⁷⁸ Robin Frame argued that the absence of “linear—if not orderly—succession” and the exclusively agnatic character of Irish inheritance precluded the building of a native lordship that could be integrated in the wider English world, as indeed happened, for example, in Scotland.³⁷⁹ Nevertheless, the exact nature of the Irish succession system, the weight of qualifications by which candidates were chosen and the composition of the elective assemblies remain hotspots of discussion. The interpretations range from the judgment that elections were an ideological façade to “power-politics” to the claim that Irish chiefdoms constituted proto-democratic states.³⁸⁰

Eóin Mac Neill theorized that candidates were chosen within a ruling king’s *derbfine*, (the descendants of a single paternal great-grandfather).³⁸¹ A single *derbfine* contained a significant number of *rigdamna*, as Irish kings were polygamous and had numerous sons.³⁸² *Rigdamna* who failed to attain kingship could forfeit their descendants’ chances of qualifying for succession, as they would become more than three generations removed from the former king and, thus, no longer be part of a *ri*’s *derbfine*. To protect their lineages from this downward social mobility, *rigdamna* would attempt to expand into neighboring chiefdoms, sometimes founding overkingdoms of their own. If territorial expansion was not an option, lineages would instead sideline their own vassals and grant their lands to members of their *cenél*.

These co-related processes of aggressive expansion, political fragmentation and vassal sidelining can all be seen in the Gaelic kingdom of Thomond. As mentioned above, the Mic Mathgamha of Corcabhaiscinn are themselves a split of the Uí Bhríain, descendants of Mathgamhain Ua Briáin (†1129) who conquered the chiefdom from the hands of a previous

378 MACNEILL, Eoin, **Phases of Irish History**, Dublin: M.H. Gill & Son, 1290, p. 300.

379 FRAME, Robin, Ireland after 1169: Barriers to Acculturation on an ‘English’ Edge, in: STRINGER, Keith J.; JOTISCHKY, Andrew (Orgs.), **Norman Expansion: Connections, Continuities and Contrasts**, Farham: Ashgate, [s.d.], p. 137, 139–140.

380 Ó CORRÁIN, **Ireland Before the Normans**, p. 39; GIBSON, **From Chiefdom to State in Early Ireland** Chapter 11, The Social Dynamics of Irish Chiefdoms: Succession to Office, para 5.

381 Cf. **Early Irish Kingship and Succession**, p. 27.

382 Some Early Medieval treaties postulate that sons of primary wives (*cétmuintir*) had primacy in succession over the children of secondary spouses (*adaltracha*). Bart Jaski, however, found no evident that this norm was applied in practice. Cf. *Ibid.*, p. 143–154.

cenél, the Uí Domnaill.³⁸³ After the defeat of the English in 1318, the Mic Conmara of Clann Chúillen took over most of the former manor of Bunratty as well as the *tuatha* of their main Irish allies, the chiefdoms from *trícha cé*t Uí mBloid. The *cenél* split soon afterwards into two different septs, the western and the eastern Mic Conmara. The Uí Ghráda of Cenél Dunghaile were also completely sidelined, eventually losing the entirety of their secular power and living on as an exclusively ecclesiastical lineage.³⁸⁴ In the 16th century, the Uí Bhriain also encroached upon lands of their vassals, such as the Uí Dheaghaigh, Uí Lochlainn and Mic Mathgamha.³⁸⁵

The fact that every male member of king's *derbfine* was technically eligible for succession did not mean everyone had a chance at being elected. Donnchad Ó Córráin argued that succession was fundamentally decided by "family power-politics" in which "the strong succeeded [and] the weak went to the wall".³⁸⁶ In practical terms, this meant that the qualifications for succession could be systematized by three imperatives: 1) the proximity of a lineage's power center, 2) the control of the clan's resources and 3) his own personal ability.³⁸⁷ This measure of worth is sometimes referred to as *febas* (lit. "excellence"), a virtue Bark Jaski compared to the Roman *dignitas* and Immo Wartjes described as a combination of affluence and military power.³⁸⁸ These criteria tended to privileged a small number of candidates – namely, the close kin of the ruling king and heads of important sub-lineages – rather than all *rigdamna*.

The nature of the factions in dispute during the wars of 1276-1318 in Thomond illustrate these principles. Although the Uí Bhriain possessed many branches – several of which held subkingdoms of their own – it was only the two strongest sub-lineages, the descendants of Tadhg Caoluisce Ó Briain [6] and those of Brian Ruad Ó Briain [7] who competed for kingship. A third notable sub-lineage of the Uí Bhriain, arguably rivaling Clanna Tadhg and Brian Ruad in power, did not attempt to seize the chiefdom, although they played a large role supporting Clann Brian in the conflict. The reason for their compliance

383 GIBSON, *From Chiefdom to State in Early Ireland*, Chapter 11: An Overview of the Social and Political Systems of Thomond, Chiefdom Structure: Heterogeneity, para 3.

384 NIC GHIOLLAMHAITH, *Kings and Vassals in Later Medieval Ireland: The Uí Bhriain and the MicConmara in the Fourteenth Century*, p. 202.

385 GIBSON, *From Chiefdom to State in Early Ireland*, Chapter 10: The Political Topography of Late Medieval Thomond.

386 Ó CORRÁIN, *Ireland Before the Normans*, p. 39.

387 *Ibid.*

388 JASKI, *Early Irish Kingship and Succession*, p. 276; WARNTJES, *Regnal succession in early medieval Ireland*, p. 410.

lies with a particular institution in Irish kingdoms, specifically designed to moderate the ambitions of potential claimants.

The *Tánaiste*

The *tánaiste* (lit. the “second”) was a title given as a consolation prize given to would-be pretenders to kingship to dissuade them from rebellion. *Tánaistí* received vast grants of land, but which were nevertheless far removed from a ruling lineage’s *ceann áit*.³⁸⁹ In this way, they were both empowered by the king and kept at arm’s reach.

During the wars in Thomond in 1276-1318, the position of *tánaiste* was occupied by Mathgamhain Ó Briain [8], a distant cousin of Tadhg and Brian Ruad. Mathgamhain is mentioned as *tánaiste* in a 1308 entry from the Annals of Inisfallen³⁹⁰, but appears to have been politically active in some capacity from the very beginning of de Clare’s operations in Thomond.³⁹¹ According to the CT, he came to Brian Ruad “with his sons and great kerns” as soon as the king was inaugurated by Thomas in 1277.³⁹² He is mentioned marching alongside Brian Ruad’s son Donnchad [11] in the very next year, and remained consistently allied to de Clare and Clann Brian Ruad throughout the span of the conflict.³⁹³ Why Mathgamhain never attempted to seize the kingship for himself becomes clear when we glimpse at the extent of his lands:

It was neither an honour nor a credit for Muirchertach Ó Briain that Mathgamhain Ó Bhriain did not give him allegiance, as he had given to his father and to his brother, i.e. to Toirdhealbhach and to Donnchad. It tormented his heart to have him in the old *longport* of his father, i.e. the noble residence of Inchiquin, and it was hard that Irrus, the dunes, Uí Bhréacain, a part of western Corcamruad, half of

389 GIBSON, **From Chieftdom to State in Early Ireland**, Chapter 9: The World of the Caithréim Thoirdhealbhaigh, The Opposed Confederacies of the Ua Briain Civil War, para 13.

390 “*Sluaigid la Nicolas fi Muiris & la Muiris fi Risibard, & la Machtamain mac Domnaill Connactaigh, tanaisti Tuadmuman*” AI 1308.8. MAC AIRT (Org.), **The Annals of Inisfallen**, p. 400.

391 Not, perhaps, as *tánaiste*, as the Annals of Inisfallen claim that Toirdhealbhaigh’s brother Domhnall was Thomond’s *Tánaiste* in 1281, when he was murdered by the English in Quin. Cf. AI 1281.9. *Ibid.*, p. 380. It is possible he only held the title while Clann Brian Ruad was in power.

392 “*táinic tra Mathgamain O Briain [.i. mac Briain mic Domnaill chonnachtaig] cona macaib agus cona mórcheiternaib*” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 6.

393 “*Is grod ina diaid sin go ndeachaid [Donnchad] mac Briain [ruaid] brígaigentach, agus Mathgamain O Briain cona mórso chraitib, tromsluag tairrtech go críchaib buacárda Bóirne, agus as sin go Corcmoruaid*” *Ibid.*, p. 9–10.

the upper *trícha cé*, Uí Flannchada and western Cenél Aodha one after the other, without exceptions in between, from [Cúchullain's] Leap in the east to Cill mic Duach, were on de Clare's lap.³⁹⁴

Gibson suggested Mathgamhain's lands in Corcamruad refer to Túath Uí Glae, an ancient region which Westropp situated in the parishes of Clooney, Kilfenora and Killaspuglonane³⁹⁵. The upper *trícha cé* is Cenél Fermaic, probably the parish of Killinaboy, where his *céann áit*, the *crannóg* of Inchiquin, was located. The territory of Uí Flannchada corresponds to the parish of Kilkeedy. Cenél Aodha lay in present-day county Galway. Its western half probably corresponds to the parish of Kilmacduagh, adjacent to Kilkeedy, where lies the abbey of the same name, also mentioned in the description.

394 *Acht énni chena: nír miad is nír maise le Muirchertach O n Briain gan Mathgamain O mBriain do chreidem dó féin amail do chreid dá athair agus dá dherbráthair.i. do Toirdelbach agus do Donnchad, agus ba chrád croide || leis a beithsiun i longportaib a athar.i. i nisdad uasal innse úi Chuinn; agus ba hanna leis Irrus agus na dúinte agus úi Brecáin, agus blagh do Chorcmo druaid iartharaig, agus leth trícha cé uachtarach, agus úi Flann chada agus cenél Aodha iartarach i gcionn a chéile, gan techt eturru ó'n léim aniar go cill mic Duach, do beith fáil a hucht in Chláraig. Ibid., p. 134. (Author's translation)*

395 GIBSON, **From Chieftom to State in Early Ireland**, Chapter 9: The World of the Caithréim Thoirdhealbhaigh, The Opposed Confederacies of the Ua Briain Civil War, para 11.

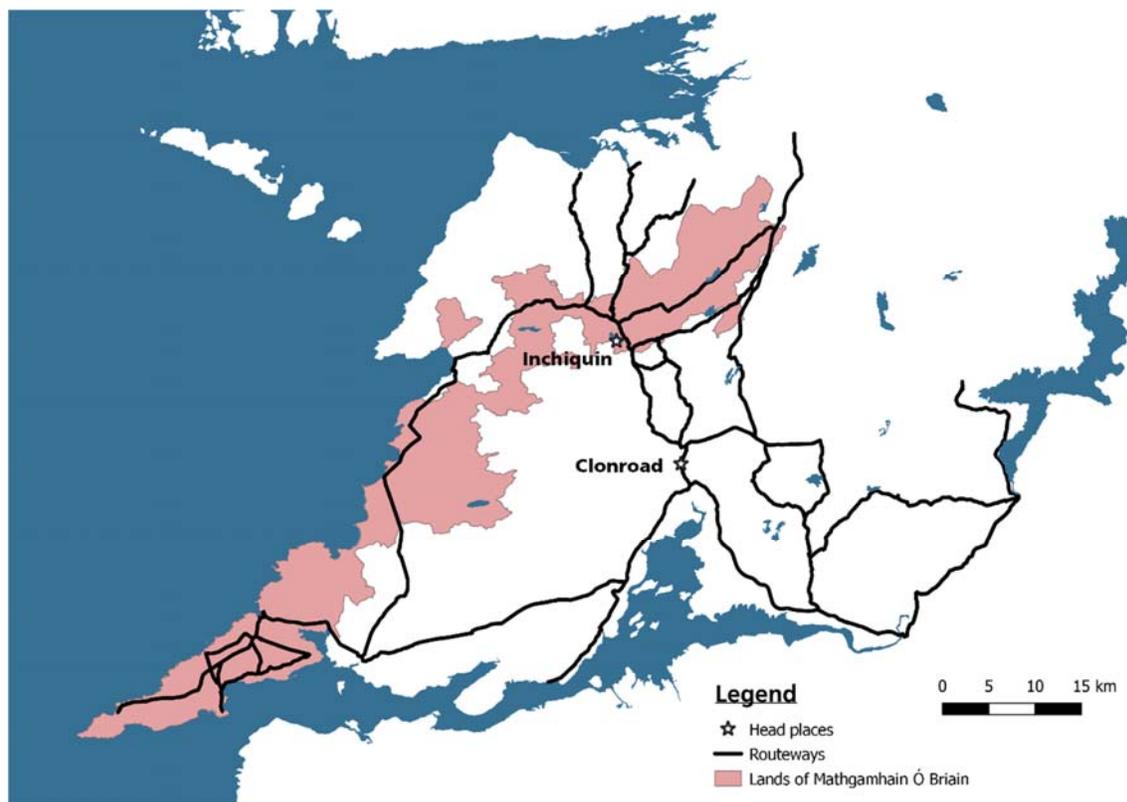


Figure 28: The lands of Mathgamhain Ó Briain

Altogether, Mathgamhain ruled over an immense extent of land (fig. 28), covering, as the CT grimly notices, over a third of Thomond.³⁹⁶ This considerable power base would not only have endowed Mathgamhain with abundant resources, but also left him in a privileged position to tip the scales of the Clann Tadhg-Clann Brian Ruad dispute. Moreover, the geographical disposition of his holdings invites us to look to the relationships between the kings of Thomond and their vassals and allies in a different light. The very location of *tánaiste*'s *ceann áit* in Inchiquin would have put pressure on Cenél Fermaic, notwithstanding the Uí Dheaghaigh's sympathies towards Clann Tadhg between 1276-1318.³⁹⁷ It is no wonder the *cenél* found itself divided between competing sub-lineages on more than one occasion.³⁹⁸

396 "Fada figrach ferg in rí. Muirchertaig co maoidh mórgnín; trén do dígail a fhalaid. in mílid ar Mathgamain Beg do Tuadmumain nár thrían. do bí ag Mathgamain O mBrian". O'GRADY (Org.), *Caithréim Thoirdhealbháigh*, p. 136.

397 See "Fosterage and Gossipred", below.

398 See, e.g. "gur timcellatar crecha O Cuinn agus O caomDeghaidh, nach aon ro boi na nagaidh do na haicmeduib sin; óir do bátar dronga d'ib Deadhaigh ina nderbchomaltaib i timcell Tordelbaig do'n turus sin"

Mathgamhain's hold on Tuath Uí Glae would also have brought into his sphere of influence Caherballykinvarga and Kilfenora, the *ceann áit* and an important ecclesiastical settlement of the Uí Conchobhair of Corcamruad, respectively. Finally, the *Botháir na Mic Riogh* – a road that connected Clonroad with Corcamruad and Boireann – and Fidhail's pass – a routeway that led from Thomond to Connacht – were situated well inside the *tánaiste*'s domains. This meant the king of Clann Tadhg would have to place themselves under Mathgamhain's reach to arrive at their English allies, the de Burghs, or to conduct any operations in the northern kingdoms. Unsurprisingly, it is the *tánaiste*, rather than Richard de Clare, whose actions are depicted by the CT as the main trigger of the Dysert O'Dea campaign. According to the CT, Muirchertach Ó Briain joined the Butlers and the de Burgh in a campaign against Brian Bán of Clann Brian Ruad [18] in the territory of Ely, east of Thomond. The expedition floundered due to a string of complications, among which the participation of Mathgamhain's army, who joined Brian Bán and his external allies, the Uí Cherbaill.³⁹⁹ Unwilling to “openly break the peace with de Clare”, Muirchartach decided instead to “take his vengeance [...] on Mathgamhain's *oireacht*”, who promptly asked for the English lord's help.⁴⁰⁰

As this series of events illustrate, by the time of the wars of 1276-1318, even the feuds between sub-lineages of Irish chiefdoms were inextricably entwined with the fortunes of Anglo-Irish magnates. It is necessary, therefore, to explore who they were.

3.2 English magnates

In medieval England, magnate (in Latin, *magnatus*) was a term for a member of the aristocratic elite, either temporal or spiritual.⁴⁰¹ Its usage broadly corresponds to the group of

O'GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 19. In a different passage, the CT tells us that one of their kings, Donnchad Ó Dheaghaigh, was killed by relatives: “go dtáinic díth Donnchaid do'n dianchomairle sin, gur marbadh go mochtinnesnach in mílid le Lochlainn riabach O Degaid agus le Macraith O Degaid” *Ibid.*, p. 28.

399 *Dorónad tra sluaiged sin geimred sin le Buitiléraib na hEirenn agus le sir Uilliam Búrc agus le Muirchertach O mBriain fós d'innsaigid Bhriain í Bhriain agus Donnchaid fhinn í Cherbaill i nEilib, agus dob é sin sluaiged in ghlasdaire. do chuiretar aroile dáine ar Mathgamain O mBriain na gáidil agus na gaill dá raibe sé ina bfarrad do tréigen do Bhriain agus d' O Cherbaill* O'GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 134.

400 “agus do gabad agá dhígail air féin d'foghlaib agus d'fuadaigib agus d'éignib go dígaltach ar oirechtaib Mathgamna óir nír b'áil leo a sith risin Clárach do brised go fiadnach. Imthúsa Mathgamna í Briain: do chuir sé a mac do bí der scaigte sin tengaid bérla na ngall.i. Domnall O Briain, d'agallaim in Chláraig go Corcaig d'égnach agus d'aimles agus do chasáid í Briain agus Tuadmuman ris.” *Ibid.*, p. 135. (Author's translation).

401 PUGH, T.B., The magnates, knights and gentry, in: CHRIMES, Stanley Bertram; ROSS, Charles; GRIFFITHS, Ralph Alan (Orgs.), **Fifteenth-century England, 1399-1509: Studies in Politics and Society**, Manchester: Manchester University Press, 1972, p. 86. Pugh, p. 86

individuals who, according to the terms of the 1215 Magna Carta, were entitled to an individual summons to the king's council when the Crown wanted to discuss the levying of an aid or scutage⁴⁰²: the archbishops, bishops, abbots, earls and great barons (*majores barones*).⁴⁰³ In the words of David Crouch, they encompassed the “landowners whose interests embraced a realm and who were consequently close to its prince.”⁴⁰⁴ Among the secular elite, the highest stratum was that of the baronage – later known as the peerage – among whom the highest ranking members were the titled magnates. Only one such titled existed during the years 1276-1318 – the earl – and its holders constituted a highly exclusive title. The number of Irish earldoms in the period was only two (Ulster, created in 1280, and Kildare, created in 1316), although magnates with titles in England – such as the earls of Gloucester – also held significant amounts of land in the island. Below the earls were the untitled great barons – numbering, according to Rees Davies, some 180 families in England alone⁴⁰⁵ -- and below them the minor barons, also known as the knightly class or the gentry.⁴⁰⁶ These individuals were holders of smaller estates and often held lands of the greater barons.⁴⁰⁷

Rees Davies estimated that “[a] figure of twenty/thirty would probably err on the high side” of the probable number of prominent magnates active in Ireland at any given time.⁴⁰⁸ In theory, at least, these landholders were less independent than the Irish subkings in the context of their own political hierarchy. As Chris-Given Wilson remarks, the best they could strive for was “leadership and influence”, never “control” for they were not only subject to the consent of the Crown, but also to the pressures of the local gentry.⁴⁰⁹ In practice, however, the very nature of lordship in Ireland meant that magnates could operate with far greater leeway than their fellow barons in England. According to Robin Frame, nearly half of the land held by the English in Ireland – including Thomond – were granted as liberties, a privilege that put them outside the immediate jurisdiction of the central government and let local lords operate

402 A type of tax collected in lieu of military service. See section 3.5. “Economy and Logistics”, below.

403 *Et ad habendum commune consilium regni de auxilio assidendo aliter quam in tribus casibus predictis, vel de scutagio assidendo, summoneri faciemus archiepiscopos, episcopos, abbates, comites, et majores barones sigillatim per litteras nostra [...].* BÉMONT, Charles (Org.), **Chartes des libertés anglaises (1100-1305)**, Paris: A. Picard, 1892, p. 29.

404 CROUCH, David, **The English Aristocracy, 1070-1272: A Social Transformation**, New Haven: Yale University Press, 2011. Chapter 3 “Magnates: Earls, Barons and Peers” para 1.

405 DAVIES, Rees, **Lords and Lordship in the British Isles in the Late Middle Ages Hardcover**, Oxford / New York: OUP Oxford, 2009, p. 21.

406 GIVEN-WILSON, Chris, **The English Nobility in the Late Middle Ages: The Fourteenth-Century Political Community**, 1st edition. London and New York: Routledge, 2002 loc 364.

407 *Ibid.* loc 364.

408 DAVIES, **Lords and Lordship in the British Isles in the Late Middle Ages Hardcover**, p. 24.

409 GIVEN-WILSON, **The English Nobility in the Late Middle Ages** loc 160.

their own chanceries and exchequers.⁴¹⁰ Furthermore, as Davies argued, the accentuated regional heterogeneity of Ireland and frequent attacks by Gaelic kings nurtured a spirit of pragmatism in English magnates that compelled them to actions that “worked with the grain of local situations and practices”.⁴¹¹ These lords were willing to great lengths to safeguard their dominions, even if it meant occasionally clashing with the Crown or adopting Irish customs.

The Origins of Baronial Power in Ireland

The English colonization of Ireland dates back to 1166. In that year, Diarmait Mac Murchadha, the exiled king of Leinster, sought the help of Henry II of England to reclaim his chiefdom. Facing pressing troubles in France, the Angevin monarch did not support Diarmait outright, but allowed him to ask the support of his subjects. Among the magnates who heeded his call was the earl of Striguil, Richard fitz Gilbert de Clare, also known as “Strongbow”, who agreed to help in exchange for the hand of Diarmait’s daughter, Aífe. The invasion that followed proved to be a triumph for the Irish king. Aided by his foreign allies, he managed to seize back his chiefdom. It was no less a triumph for Strongbow himself: Diarmait passed away in 1171, making him, by virtue of his marriage to Aífe, the *de facto* king of Leinster.

It did not take long for Henry II to take matters into the Crown’s hands. Fearing Strongbow would carve out an independent English kingdom in Ireland – just like Henry’s great-grandfather, William the Conqueror, had done in England – Henry set out to Ireland with a large army, forcing Strongbow to swear fealty to him and establishing administrative centres in the prosperous cities of the eastern Irish coast. It did not take long, either, for the Irish to understand that the old equilibrium had been shaken. Most Irish kings were quick to offer submission to the Angevin monarch. The one who resisted the most, former high king Ruaidhrí Ua Conchobhair, finally relented in 1175, when he sent a delegation to England to negotiate with Henry. The result was the Treaty of Windsor, by whose terms Ruaidhrí would retain control of a substantial extent of the island in exchange for becoming the king’s “liege

410 FRAME, Robin, **English Lordship in Ireland, 1318-1361**, First Edition. Oxford : New York: Oxford University Press, 1982, p. 25. 5

411 DAVIES, **Lords and Lordship in the British Isles in the Late Middle Ages Hardcover**, p. 24.

man” (*Ligio homini suo*).⁴¹² While Henry had little intent to personally annex Ruaidhrí’s lands, the same was not true of his subjects. Motivated – or, in some cases, even forced– by the obligation to reward their vassals with land, the monarch and his successors offered speculative grants of Irish land to his magnates, who in turn came up with offers of their own to entice the ambitions of a whole generation of adventurers.⁴¹³ These settlers and their descendants would form the foundations of the English secular elite in Ireland.

412 RYMER, Thomas; SANDERSON, Robert (Orgs.), *Foedera, conventiones, literae, et cujuscunque generis acta publica, inter reges angliae et alios quosvis imperatores, reges, pontifices, principes, vel communitates*, Neaulme: Hagae Comitit, 1745, p. 13.

413 Cf. RIDGEWAY, H. W., Foreign Favourites and Henry III’s Problems of Patronage, 1247-1258, *The English Historical Review*, v. 104, n. 412, p. 590–610, 1989.

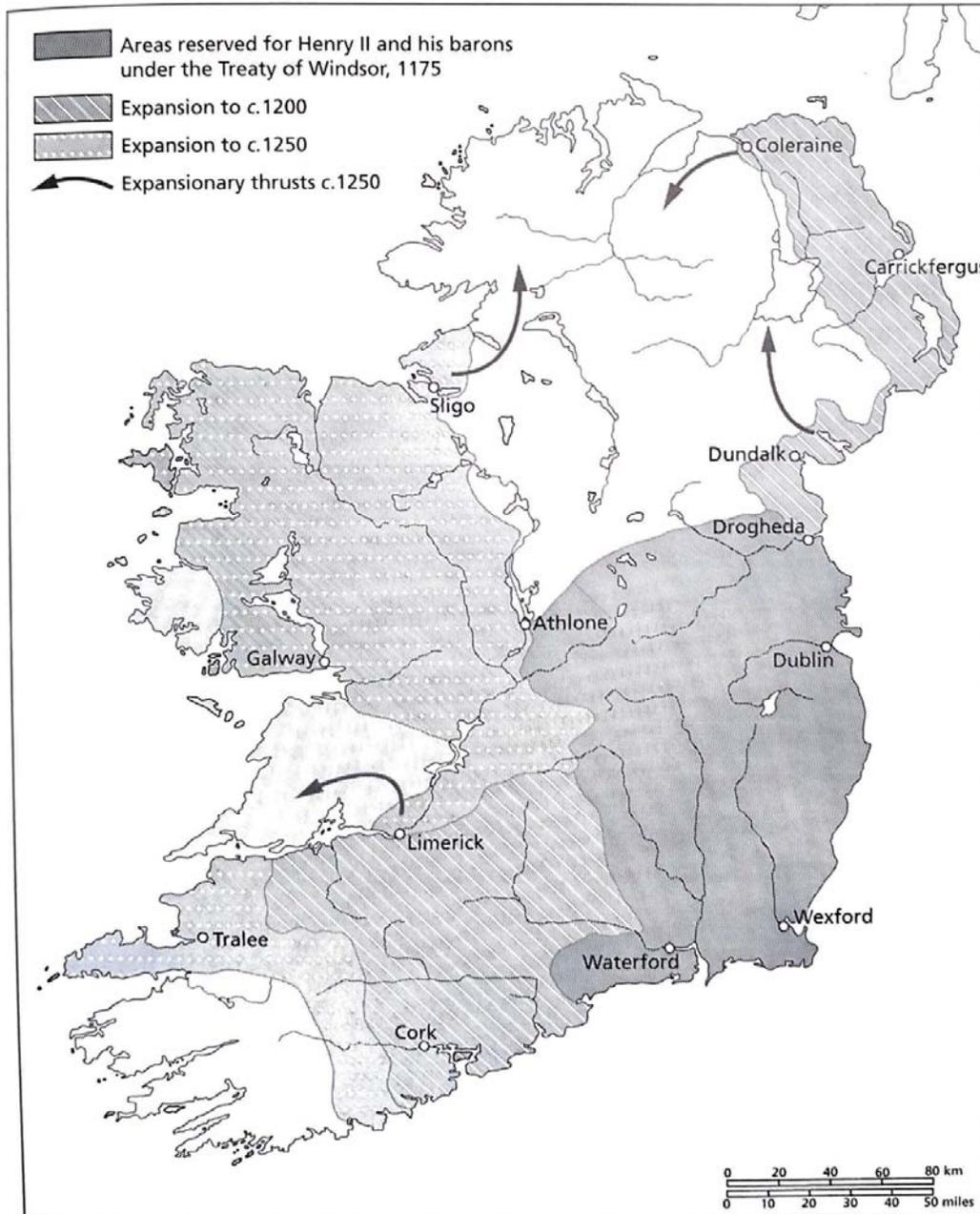


Figure 29: English Expansion in Ireland to c.1250.⁴¹⁴

By 1276, when Edward I granted Thomas de Clare the liberty of Thomond, roughly 2/3 of Ireland was in the hands of the Crown or its magnates. (Fig. 3) This English Lordship of Ireland was far from being homogeneous, and neither were the aristocratic families who ruled

414 VEACH, Colin, *Conquest and Conquerors*, in: SMITH, Brendan (Org.), **The Cambridge History of Ireland: Volume 1: 600–1550**, Cambridge: Cambridge University Press, 2018, v. 1, p. 161.

it. Some magnates brought large numbers of settlers from all corners of the English world, fundamentally changing the fabric of local society almost to the very bottom. Others were content to rule as overlords rather than colonizers, ensuring the local independence of Irish kings in exchange for tribute and political obedience. This diversity would also find expression in the fundamental unit of management and production in English lordships – the manor – which would evolve in different ways in the heavily colonized province of Leinster and in the frontier with the independent Irish kingdoms.⁴¹⁵ Finally, it would also have consequences of a different nature. Following Strongbow’s example, some of these families would intermarry and bond with the local Irish aristocracy. By the Early Modern Period, exchanges with the Gaelic world had transformed these lineages to thoroughly that they became culturally Irish, adopting the native language, customs, law and even the *fine* system of Irish *tuatha*.

Gaelicization – as this process became came to be called⁴¹⁶ – was already in progress by the late 13th and early 14th centuries.⁴¹⁷ Cultural exchanges notwithstanding, the English and Irish aristocracies of the period retained essential differences. First, unlike Irish kingdoms, the succession in English lordships followed the principles of agnatic-cognatic (i.e. male preference) primogeniture. While this made English lineages vulnerable to becoming extinguished in the male line (as indeed happen in Thomond after the death of Thomas de Clare [12] – it safeguarded them from the dynastic conflicts regularly experienced by Irish. Second, as tenants-in-chief of the Crown, English magnates in Ireland were under the authority – and protection – of English law. In an immediate level, this meant that the Irish secular aristocracy was barred from privileges such as holding offices or defending their titles at court – although some individuals managed to skirt those restrictions.⁴¹⁸ From its very first years, the colonial administration in the Lordship of Ireland was headed by a chief governor – known in the period as the justiciar – an appointed officer who represented the interests of the Crown and was endowed with resources to carry out its wishes. During the course of the 13th century, the royal administration would grow to include its own courts, chancery, exchequer

415 See section 3.5. “Economy and Logistics”, below.

416 See, e.g. NICHOLLS, Kenneth. **Gaelic and Gaelicised Ireland**. 2nd edition. Dublin: The Lilliput Press, 2003.

417 The 1317 remonstrance of the Irish kings, a letter petitioning the pope to acknowledge Edward Bruce of Scotland as king of Ireland, refers to “the English, who live in our land, that call themselves of the middle nation (*mediae nationis*)” and who “are in such a way foreigners in custom to the English of England [...] that can be called their own nation”. FORDUN, Johannes de, **Scotichronicon Genuinum: Una cum ejusdem Supplemento ac Continuatione**, Oxford: E Theatro Sheldoniano, 1722, p. 916.

418 See FRAME, Ireland after 1169: Barriers to Acculturation on an ‘English’ Edge, p. 119. and works cited therein.

and parliament, all of which would become channels magnates would seek to redress grievances and through which a sense of common identity would gradually grow.

This proximity made magnates and the Crown co-participants in what Rees Davies called “the choreography of personal lordship”, a set of bonds of dependence and privileges “at a collective and communal, as well as at a personal and individual, level” that tied people together beyond the mere obligations of tenurial lordship.⁴¹⁹ As Frame remarks, the colonial elite in English Ireland was never too distant from the king, even if the monarch itself hardly ever set foot in the island:⁴²⁰ they held land throughout the English world, had influential relatives in England, and were given patronage to myriad services performed to the Crown. If, by a stroke of bad fortune, an Irish king found his interests to be mutually exclusive to those of a Crown’s magnate, he would be hard pressed to convince the king to look at things his way.

As tilted against the Irish this state of affairs might seem at first, one should resist the image of a “Gaelic nation pitted against a unified body of rapacious invaders.”⁴²¹ Magnates often competed with their peers and were not above taking their grievances to the battlefield. Peter Crooks remarked that these clashes were not deviations from the norm, but part of a royal policy to keep its vassals in check.⁴²² If a magnate risked growing too powerful or troublesome, the king would deliberately enfeoff its rivals – or, sometimes, fabricate a rivalry by granting the same land to two or more parties. If even that failed to work, he could deliberately instigate different magnates to wage war on one another.⁴²³ Perhaps the most visible factional conflict in the 13th century was that between the de Burgh, lords of Connacht, and the Geraldines, lords of Offaly. It erupted in 1264, shortly after Walter de Burgh [5] was granted the revived earldom of Ulster, a title that was coveted by the Geraldines – although the episode may also have had a connection with the Second Barons’ War in England.⁴²⁴ The conflict flared up again in 1294, this time due to the Geraldine ambitions in Connacht, de Burgh’s power base.

419 DAVIES, *Lords and Lordship in the British Isles in the Late Middle Ages Hardcover*, p. 198–99.P. 198-99

420 FRAME, *Ireland after 1169: Barriers to Acculturation on an ‘English’ Edge*, p. 138.

421 CROOKS, Peter, “‘Divide and rule’: factionalism as royal policy in the lordship of Ireland, c. 1171-1265”, 2005, p. 265.

422 *Ibid.*, p. 271.

423 *Ibid.*

424 *Ibid.*, p. 297–304. FRAME, Robin, *Ireland and the Barons’ Wars*, in: **Ireland and Britain 1170- 1450**, London/Rio Grande: The Hambledon Press, 1998, p. 59–70.

This protracted rivalry between two of the most powerful settler lineages in Ireland would have indirect, albeit grave consequences in Thomond when, in 1276, an ally of the Geraldines – Thomas de Clare – was granted the province as a liberty. The involvement of external magnates in the wars of the Uí Bhriain was a potential conflagration waiting for a spark.

English involvement in Thomond

English attempts to bring Thomond into the Lordship of Ireland stretch much farther back than the wars of 1276-1318. Domhnall Mór Ó Briain [1], an ancestor of Tadhg and Briain Ruad, was one of the Irish kings who submitted to Henry II during his expedition to Ireland in 1171.⁴²⁵ This did little to prevent the Crown from parcelling out his domains. In 1177, according to the chronicler Benedict of Petersborough, Henry granted almost the entirety of the kingdom of Limerick – as the Uí Bhriain chiefdom was then known – to his subjects Herbert fitz Herbert, William de Dunstanville and Joel de la Pomerai.⁴²⁶ When the grantees refused the lands on the grounds that it “had not yet been acquired and subjected to the king’s rule”⁴²⁷, Henry offered it again, this time to Philip de Braose.⁴²⁸ By this time the kingdom, as the name implied, extended past the river Shannon and included the city of Limerick. By the turn of the century, however, Limerick itself had been lost to the English, soon becoming the location of a royal castle and a mint. The Uí Bhriain were forced to retreat beyond the Shannon, establishing a new *céann áit* at Clonroad, in which they were still based during the years 1276-1318.

The English, however, wanted more. As early as 1199, we find one Arnold Ketin offering the king 30 marks to swap the cantred of Tradree, held by him, for one “of the three cantreds

425 “*Mc. na Perisi do thidach i n-h[Er]ind goro gab ac Purt Lárgi go n-nechaid mc. Cormaic & mc. Tairdelbaig ina theg and sin, & as sein do go h-Ath Cliath go rabi fri re in gemrid ann sin.*” AI 1171.5. MAC AIRT (Org.), **The Annals of Inisfallen**, p. 304.; “*Abhinc autem rex exercitum movens, primo Lismoriam progressus, ibique dierum mora facta duorum, inde Cassilam est profectus. Ubi et Duvenaldus, rex Limericensis, se illi in crastino ad aquam Suirensis obviam dedit*” expugnatio, BREWER, J. S. (John Sherren); DIMOCK, James Francis; WARNER, George F. (George Frederic) (Orgs.), **Giraldi Cambrensis opera**, Vol. V, London: Longman, Green, Longman, & Roberts, 1861, p. 277 Chapter XXXI.

426 “*Deditque ibidem Herebeto filio Herebeti, et Willelmo fratri comitis Reginaldi, et Joellano de la Pumerai, nepoti eorum, regnum de Limerici pro servicio sexaginta militum, tenendum de ipso et Johanne filio suo; excepta civitate de Limeric cum uno cantredo, quem dominus rex retinuit in manu sua ad opus suum et haeredm suorum.*” STUBBS, William (Org.), **Gesta Regis Henrici Secundi Benedicti Abbatis**, Vol I, London: Longmans, Green, Reader and Dyer, 1867, p. 163.

427 “*Et ideo maxime praefati milites regnum illud de Limeric habere noluerint, quia nondum erat adquisitum nec subjectum dominio domini regis.*” *Ibid.*, p. 173. (Author’s translation)

428 “*et ibi dedit Philippo de Brusa totum regnum de Limeric, pro servitio sexaginta militum.*” *Ibid.*, p. 172.

which our lord the king retains for his use in Corcabhaiscinn”.⁴²⁹ Whether or not Arnold was already settled in Tradree at this date, it shows the Crown already had its eyes on the lands along the Shannon estuary. Tradree is mentioned as the king’s province again in 1216, when king John granted 10 *librates* of land to the knights Milo de Cogan and Walter Bloet.⁴³⁰ A year before, he had also granted the woods of Cratloe to Geoffrey Lutterel.⁴³¹ In January 1217, king Henry III ordered the justiciar Geoffrey de Marisco to help Thomas fitz Adam, an Englishman who held lands in Corcabhaiscinn, to build a castle in the region.⁴³² The Annals of Clonmacnoise mention that Geoffrey himself founded a castle in Killaloe around the same time, to “forc[e] the inhabitants to receive an English bushop [sic]” – his own nephew, Robert Travers.⁴³³

It is questionable whether any of these grants resulted in an enduring settlement.⁴³⁴ In the 1250s, however, things were bound to change rapidly. Three different entries of the Annals of Inisfallen (1257.3, 1258.2, and AI 1260.7) mention the coming of foreigners to Thomond.⁴³⁵ One such incursion was arguably organized by John fitz Thomas, 1st baron of Desmond. The invasion itself is mentioned by a 1275 petition that attributes its occurrence to 17 years

429 “Ernaldus Ketin(...) dat domino Regi xxx marcas per habendo escambio de cantredo de Tradere et cepit in excambium mediocrem cantred(...um) de ill(os) iij. cantred(os) quos dominus Rex retinuit ad opus suum in Corkinbaskin.” Oblata Roll John 1 m.15 DUFFUS HARDY, Thomas, **Rotuli de oblatiis et finibus in Turri londinensi asservati, tempore regis ...**, London: G. Eyre and A. Spottiswoode, 1835, p. 28.

430 “Rex G. de Mariscis Justiciarius suo Hiberniae, salutem. Mandamus vobis praecipientes quod de terra nostra de Tradere quae est in manu vostra habere faciatis dilectis et fidelibus nostris Milon’ de Cogan et Walter’ Bloet sine dilatione x. Libratas terre et residuum terre ipsius ad opus nostrum custodiatis. Close Roll 18 John m.9 DUFFUS HARDY, Thomas (Org.), **Rotuli Litterarum Clausarum in Turri Londinensi Asservati, Vol. I**, [s.l.: s.n.], 1833, p. 272.

431 “Rex G. de Mariscis salutem. Sciatis quod dedimus dilecto et fideli nostro Galfrido Lutterelo totum boscum suum de Cratelerche in Tudmundia cum omnibus pertinenciis suis in perpetuum praesidendum.” Patent Roll 17 John m.18 p. 151 DUFFUS HARDY, Thomas, **Rotuli Litterarum Patentium in Turri Londinensi Asservati 1201-1216**, [s.l.: s.n.], 1835, p. 151. Patent Roll 17 John m.18 p. 151

432 “Mandatus est G. de Mariscus Justiciarius Hiberniae quod de gente et allis habere faciat sine dilatione et difficultate aliqua Thome filio Ade efficax auxilium in hac estate si fieri possit ad firmandum castrum suum in terram sua de Corcobasky Eithragh’ quam habet de dono domini Norwici Episcopi et concessione domini Regis J. Patris domini Regis” Close Roll 1 Henry III m. 16 DUFFUS HARDY (Org.), **Rotuli Litterarum Clausarum in Turri Londinensi Asservati, Vol. I**, p. 310.

433 MURPHY, Denis (Org.), **The Annals of Clonmacnoise**, Dublin: University Press, 1896, p. 228; SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1171-1251** n. 738.

434 Cf. ORPEN, **Ireland Under the Normans, Vol.4**, p. 53–58. for a discussion of the episodes

435 “Isin m-blein sein dacuodar Gill a Tuodami & da marbad ann a lan dib, & da marbadarsun Mathdamin mac Domnill Connactig Brein.” AI 1257.3 MAC AIRT (Org.), **The Annals of Inisfallen**, p. 356. “Isin blein sen dacuodar na Gill aris i Tudhamin, & ni dersat olc ann act ra kellif is ra clerkeb, & ra lasgedar na Gedhil Árd Rathin.” AI 1258.2 *Ibid.* “Gill du tidhact a Tuodhumin & dini mathi dif d’ég ar sligi do galur.” AI 1260.7 *Ibid.*, p. 360.

prior.⁴³⁶ From the magnate's 1261 inquisition post-mortem, we learn that he had acquired lands in "Cruchlidocassyn", "Oxilyd" and "Crkemricth" (possibly Uí Caisín, Uí mBlóid – often anglicized as "Omílid" – and Corcamruad) in Thomond, which were nevertheless "worth nothing" due to the war with the Irish.⁴³⁷ Fitz Thomas was not the only magnate the then king of Thomond, Conchobhair Ó Briain [4], had to contend with. In 1253, the justiciar John fitz Geoffrey acquired a grant of land, this time for the cantred of the Isles, a part of Corcabhaiscinn.⁴³⁸ In 1251, the king temporarily remitted the annual farm owned by Robert de Muscegros for the cantreds of Tradree and "Ocorm'" (Uí Cormaic) so that he could incastellate his lands.⁴³⁹ One of these castles, Bunratty, would become the *caput* of a manor of the same name during the wars between Clann Tadhg and Clann Brian Ruad.

When Edward I handed these cantreds to Thomas de Clare in 1276, English attempts to establish a lordship east of the Shannon were therefore far from new. These grants are evidence of a long-harboured wish to settle lands that were amenable to tillage agriculture and situated by the Shannon estuary, being thus easily to access and supply from other Irish ports and England itself. The fact that the cantreds only returned to the king's hand because Robert de Muscegros, grandson of the original grantee, gave up on dealing with Irish aggression, attested a more problematic truth.⁴⁴⁰ Prosperous as it might have been, Thomond was a seriously difficult prize, thanks in no small part to the tenacity with which the Uí Bhriain defended what was left of their dilapidated kingdom.

From Edward I's point of view, Thomas de Clare must have seemed an adequate answer to his Thomond problem. The de Clares were a distinguished and powerful lineage, whose connections to the English Crown were older than the Norman kingdom of England. The family was politically active in the duchy of Normandy from as early as the 10th century.⁴⁴¹ It was a de Clare – Strongbow – who married Diarmait Mac Murchadha's daughter Aífe and paved the way for the establishment of an Anglo-Irish baronage. By the late 13th century, the de Clares held the earldom of Gloucester and Hertford and substantial holdings in Ireland.

436 SWEETMAN, H.S. (Org.), **Calendar of Documents Relating to Ireland, 1252-1284**, London: Longman & Co., Trübner & Co., Paternoster Row; Parker & Co, Oxford; Macmillan & Co, 1877 n. 1181.

437 *Ibid.*, p. 429 n.1912.

438 *Ibid.*, p. 43 n.289.

439 "*Rex dedit Roberto de Muscegros in auxilium castrorum de Traderi et Ocorm' in Hibernia firmandorum, firmam suam duorum annorum proximo sequencium, videlicet xxx. librarum per annum quas rex solvere deberet ad Scaccarium Dublinensis por terra sua quam habet apud Tohmund'(...)*" Close Roll 35 Henry III m.12 **Close Rolls of the Reign of Henry III A.D. 1247-1251**, London: HMSO, 1922, p. 448-49.

440 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1252-1284**, p. 211 n.1167.

441 ALTSCHUL, Michael, **A Baronial Family in Medieval England: The Clares, 1217-1314**, Baltimore: Johns Hopkins University Press, 2019, p. 17.

Although a mere younger son of earl Richard (d.1262), originally educated at Oxford for a possibly clerical career,⁴⁴² Thomas' history of administrative and military service indicates how far the 'choreography of personal lordship' could take an individual who enjoyed proximity with the king. A veteran of the Second Baron's War (1264-67)⁴⁴³ and the Ninth Crusade⁴⁴⁴ (1271-72) alongside future king Edward I, Thomas was granted financial aid to pacify Thomond in exchange for his services commanding royal expeditions against Irish rebels at Glenmalure.⁴⁴⁵

Royal favour, however, would only take a magnate so far. "However sophisticated [his administration] may have been" concluded Beth Hartland, it "was not equipped to deal unaided with the ravagings of the O'Brien contenders for the Irish kingship of Thomond".⁴⁴⁶ de Clare would need to acquaint himself with the means to ensure the compliance of his Irish vassals, to compel them to military action, and to employ the right tactics to bring them to heel. In Robin Frame's words, he would need to master "the making of war and the making of peace", in light of which the de Clares, as other magnates in Ireland, "were sharers in a common burden which the government was only too anxious to see spread."⁴⁴⁷

3.3. The Making of Peace

Marriage alliances

As newcomers to the Irish political community, the lords of Thomond quickly understood they needed help from established Anglo-Irish lineages. Even before being granted the liberty of Thomond, Thomas had already married Juliana, daughter of Maurice fitz Maurice [3] of the Geraldines of Offaly. The latter gave his son-in-law the vill of Youghal and the manor of

442 *Ibid.*, p. 187.

443 *Ibid.*, p. 188. and evidences cited therein.

444 *Quidam ergo corde compuncti crucem protinus receperunt, inter quos fuerant Thealdus archidiaconus Leodicensis [...] et nobilis vir, Thomas de Clara qui spreto consilio fratris sui, comitis Gloverniae, regem adiit, et ei fideliter obedivit*" LUARD, Henry Richards (Org.), **Flores Historiarum, Vol.III. A.D. 1265 to A.D. 1326**, London: HMSO, 1890, p. 14.

445 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1252-1284** n.1191.

446 HARTLAND, Beth, English Lords in Late Thirteenth and Early Fourteenth Century Ireland: Roger Bigod and the de Clare lords of Thomond, **The English Historical Review**, v. CXII, n. 496, p. 318–348, 2007, p. 322.

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447 FRAME, R. F., **The Dublin Government and Gaelic Ireland: the Making of War and the Making of Peace in the Lordship 1272-1361**, thesis, Trinity College (Dublin, Ireland). Department of History, 1971, p. 414.

Inchiquin in February 18 1275, indicating that the marriage must have happened before that date.⁴⁴⁸ Richard de Clare, on the other hand, married Joan, a possible daughter of Thomas fitz Maurice of the Geraldines of Desmond.⁴⁴⁹ The alliance with the Offaly branch of the Geraldines, specifically, was opportune for the Crown, as it contributed to curb the influence of the de Burgh, by then the most powerful baronial lineage in Ireland. Unfortunately for de Clare, the bad blood between the two families made him a target of the de Burgh, who did not hesitate in interfering in the wars in Thomond on the side of Thomas' Irish enemies, the kings of Clann Taidhg.

The de Clares were not the only ones to attempt to establish connections by marrying off their family members. Irish kings were no strangers to matrimonial alliances, although the changing landscape of post-Invasion Ireland had an effect in their choice of spouses. Aoife Nic Ghiollamhaith remarked that the English expansion in the 13th century cut off Irish lineages off from one another – not only territorially, but also diplomatically. Marriages between different regional overkings became less frequent, whereas alliances started to spring between overkings and their subkings, their English neighbours, and even between subkings and English neighbours themselves.⁴⁵⁰ The Uí Bhriain of Thomond, specifically, had a history of intermarriage with the de Burghs, English lords of Ulster and Connacht, dating to Domhnall Mór Ó Brien [1], who married his daughter to the first de Burgh magnate in Ireland, William [1]. During the wars of 1276-1318, both Clann Tadhg and Clann Brian Ruad appear to have had marriage ties with the family, although the details of these unions are difficult to sketch out. William “Liath” de Burgh, a nephew of earl Richard of Ulster [4], was married to a daughter of Brian Ruad Ó Briain [7], whose name may have been either Mór or Fionnuala.⁴⁵¹ According to the Annals of Inisfallen, Toirdhealbach's mother, also

448 SWEETMAN, H.S. (Org.), **Calendar of Documents Relating to Ireland, 1285-1292**, London: Longman & Co., Trübner & Co., Paternoster Row; Parker & Co, Oxford; Macmillan & Co, 1879 n.1142.

449 A parliamentary petition from 1320 identifies Maurice fitz Thomas, Thomas fitz Maurice's son, as the uncle of Joan's and Richard's son, Thomas: “[...] *Dame Johan de Clare miere de le dite Thomas :et s'il plesse a nostre Seigneur le Roy faire au dit Thomas cest grace, prie il q'il voille grauntier Gardeyns Monsieur Moriz le fitz Thomas son Uncle [...]*” **Rotuli Parliamentorum, ut et petitiones, et placita in Parliament Tempore Edwardi R. I. Vol. 1**, [s.l.: s.n.], 1767, p. 385 n.118.

450 NIC GHIOLLAMHAITH, Kings and Vassals in Later Medieval Ireland: The Uí Bhriain and the MicConmara in the Fourteenth Century, p. 201.P.

451 She is referred to as Fionnuala in the register of the Dominican abbey of Athenry, where William was buried. “*Item, Willelmus canus de Burgo et Fynnola ingen y' Bryan ruadh sua uxor*”. BLAKE, Martin J., Notes on the Persons Named in the Obituary Book of the Franciscan Abbey at Galway (Continued), **Journal of the Galway Archaeological and Historical Society**, v. 7, n. 1, p. 1–28, 1911, p. 9.. However, she is mentioned as Mór in the so-called Fragmentary Annals of the West of Ireland, a fragmentary source probably written in Thomond in the late 14th or early 15th century: “*Mor filia Brieyn Ruag Y Brieyn uxor Willelmi de Burgo mortui sunt*”. GWYNN, E.J., Fragmentary Annals from the West of Ireland, **Proceedings of the Royal Irish**

called Fionnuala, was at one point married to another de Burgh called “Remuyn”.⁴⁵² Sláine, one of Toirdhealbach’s daughters, married Edmund [11], son of Richard the “Red Earl” of Ulster [7].⁴⁵³ While these alliances suggest the de Burgh courted both sides of the Uí Bhriain war, it is doubtful they significantly tilted their allegiance, given their consistent support for Clann Tadhg up to 1318, when they joined forces with Richard de Clare during the Dysert O’Dea campaign.⁴⁵⁴ The actions of the family in Thomond seem to have been dictated in response to de Clare’s connections with their Geraldine rivals, and even the importance of those cannot be taken for granted. In September 20th 1286, Richard de Burgh, Thomas de Clare and a group of Scottish nobles became co-participants in pact known as the Turnberry Band.⁴⁵⁵ Its purpose was likely to acquire Scottish help for a future campaign led by de Burgh and de Clare in Ireland.⁴⁵⁶ Seán Duffy explains this unlikely alliance by bring up the lord of Thomond’s ambitions regarding his wife’s inheritance.⁴⁵⁷ Thomas’ father-in-law, Maurice fitz Maurice [3], died in 1286. His older brother and incumbent baron of Offaly, Gerald fitz Maurice, was a sickly man by the time of the treaty and died the very next year. Given that Maurice only sired daughters, Thomas expected that at least some of the Geraldine estates would fall into his hands. Instead, the inheritance – as well as the title of baron of Offaly –

Academy. Section C: Archaeology, Celtic Studies, History, Linguistics, Literature, v. 37, p. 149–157, 1924, p. 151. Seán Duffy stands by the Mór hypothesis, due to the fact that another source, the early 15th *Tuarasgbháil Ua Maine*, mentions that William had a daughter called Mor – possibly in honor of his wife.: “*Mor, ingen Uilliam leith a búrc, mathair Donnchaid*” O’DONOVAN, John (Org.), **The tribes and customs of Hy-Many, commonly called O’Kelly’s country**, Dublin: Irish Archaeological Society, 1843, p. 52. Cf. DUFFY, Séan, *The Problem of Degeneracy*, in: LYDON, James F. (Org.), **Law and Disorder in Thirteenth-century Ireland: The Dublin Parliament of 1297**, [s.l.]: Four Courts Press, 1997, p. 92. The evidence is tentative either way.

452 “*f-Finguolu ingean mc. Brien, mathair Tardealbaig I Br(ien) acus bean Remuyn da Búrc, quieuit in Christo.*” MAC AIRT (Org.), **The Annals of Inisfallen**, p. 382 AI 1282.6.

453 “*Ben mic ind Iarla Uladh .i. inghen Toirrdhealbaig .H. Briain, do thabhairt do Toirrdhealbhach .H. Conchobhair ri Connacht, & Derbail inghen Aeda .H. Dhomhnaill do lecad do isin bliadhain sin.*” ALC 1339.6 HENNESSY, William M. (Org.), **The Annals of Loch Cé. A Chronicle of Irish Affairs from A.D. 1014 to A.D. 1590.**, Oxford/Cambridge/Edinburgh/Dublin: Longman, 1871, p. 630. Her name is given by the Annals of Ulster: “*Slaine ingen Uí Briain ben Toirrdelbaigh Uí Concobuir & derbshiuir a mathar fein fos, mortua est*” AU 1340.1 MAC CARTHY, B. (Ed. & Trad.), **Annala Uladh: Annals of Ulster otherwise Annala Senait, Annals of Senat.**, Dublin: HMSO, 1893, p. 474..

454 “*Imthúsa in Chláraig: do chuir fesa agus techta go sir Uilliam óg a Búrc, dá rád ris Mathgamain O Briain agus cenél nDúngaile cona noirechtaib agus cona nimirgedaib do díon agus do tidlacad go coraidh cille suaichenta solasgainmige srebinfuaire sruthgairb mire Subalaig*” O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 140.

455 “[...] *quod nos cum tota potentia nostra indeficienter adhaerebimus nobilibus viris domino Ricardo de Burgo, comiti Ultoniae, et domino Thomae de Clare, in omnibus negotiis suis, et cum eis atque complicibus suis fideliter stabimus contra omnes eis adversantes.*” STEVENSON, Joseph (Org.), **Documents Illustrative of the History of Scotland from the Death of King Alexander the Third to the Accession of Robert Bruce, Vol.1**, Edinburgh: H. M. General register house, 1870, p. 23.

456 DUFFY, Sean, *The Turnberry Band*, in: DUFFY, Sean (Org.), **Princes, Prelates and Poets in Medieval Ireland: Essays in Honour of Katharine Simms**, Dublin: Four Courts Press, 2013, p. 126.

457 *Ibid.*, p. 128.

passed to Maurice's nephew, John fitz Thomas. This common desire to undermine fitz Thomas' recently acquired power base put de Burgh and de Clare in the same page. According to Duffy, the expedition hinted at the Turnberry Band is no other than an attempt to seize some of the Geraldine holdings.⁴⁵⁸

The marriage links of the earls of Ulster and lords of Thomond could influence their involvement in the wars between the Uí Bhriain. However, as this episode demonstrates, even they could be overruled by more immediate political concerns. The interference of the de Burgh in Thomond should probably be seen in this light as well. As Orpen remarked, the Uí Bhriain kingdom forms a literal wedge between de Burgh estates in Connacht and Limerick, being thus a region of paramount strategic importance.⁴⁵⁹ The earls of Ulster were willing to do whatever it took to keep it under their influence.

One marriage alliance that seem to have had significantly more weight was that between the *tánaiste* Mathgamhain Ó Briain [8] and the Mic Conmara of Clann Chúilen. In 1313, Mathgamhain approached their king Maccon on behalf of their “marriage-alliance” [*gclemmas*]

and, in a familiar manner, he requested of Mac Conmara an immense, torrential army on behalf of de Clare to defend the common territory from Clann Toirdelbach in this expedition. Clann Chúillen deliberated and said that the excellent *oireacht* should proceed with the royal hosting adhering to Clann Toirdealbach, who are brave in expeditions. [...] They surrendered their valuable hostages [*degbraigde*] [...]. And it was by great necessity that the honourable *oireachtaí* agreed to cede these hostages, for the sake of vigorously protecting the honourable friendship and the noble birthright of Clann Toirdealbach.⁴⁶⁰

458 *Ibid.*, p. 131.

459 Orpen points out that Thomond was wedged between de Burgh lands in Connacht and Limerick, being thus a region of great strategic importance. ORPEN, **Ireland Under the Normans**, Vol.4, p. 84.

460 “*Otchuala Mathgamain uaisle na tíre tiar do ghiallad do degMuirchertach, táinic do chuingid choimne ar na coilénchaib go cáirdemáil tré báid a gclemnasa; agus do iarrastar ar Mac Conmara go muinnterda sluagaid sruthlínmar a hucht in Chláraig do chosnam na críche go coitcheann re cloinn Toirdelbach do'n turus sin. do chinnetar clann Chúiléin comairle agus a dubratar na degoirechta go rachdais a rigsluaig ag lenmain chloinne turuschróda Thoirdelbaig; agus adubratar gid bé aca bud édrén sin imresain nach bud cabair dá chlanmaicnib. agus do dilatar a ndegbraigde .i. Mathgamain mórthuicsech minbriathrach milis-ráitech || mac Conmeda michairghlic, agus dá mac Lochlainn lebairchrechaig laomscarchróda látharchobsaid laomthidlaictig, agus sinnser cloinne Mic Con chruthmilla chráisechréid chloidemguirm chríchlínmair. ba mór in téigen do na fialoirechtaib faomad dilsigte na ndegbraigded sin tré fialcháirdes agus tré uasaldúthcas cloinne Thoirdelbaig do tréchosnam.*” O'GRADY (Org.), **Caithréim Thoirdealbhaigh**, p. 70–71. (Author's translation).

Clann Chúillen found itself divided in its loyalties: while the kingdom's *oireacht* supported Clann Tadhg, – at least, according to the CT – Maccon was bound by marriage to the *tánaiste* Mathgamhain, who supported Clann Brian Ruad. While the treaty did not compel Mac Conmara to march alongside Clann Tadhg's enemies, it did tie their hands even further by forcing them to surrender hostages.

Unfortunately, because the names, origins and actions of aristocratic Irish women are seldom mentioned in the Gaelic sources relating to Thomond, we know almost nothing about marriage alliances outside the Uí Bhriain and Mic Conmara *cenéla*. It is very likely other Irish kings were similarly caught the obligations of their personal connections and the imperatives of the political, and these dilemmas may have been behind the dynastic strife the CT occasionally alludes to. For this reason, we should not, in any condition, assume that the few alliances for which we have evidence amount to anything close to the full picture.

Fosterage and gossipred

Another – and more abundantly documented – means of establishing alliances was fosterage. Common to Northwestern Europe, the practice consisted in surrendering children to adoptive parents during part of their upbringing. Infants traditionally lived with their foster parents from the age of seven to fourteen (in the case of girls) and seventeen (in the case of boys).⁴⁶¹ According to Peter Parkes, fosterage acted like an ““alternative social structure” of inter-familial allegiance” intimately related to clientship relations.⁴⁶² These bonds rarely occurred between close relatives, given the frequency and violence of intra-family feuds. Rather, fathers usually ceded their children to foster parents of lesser status, generally in exchange for material benefits.⁴⁶³ To Parkes, these bonds were a means to cement alliances, favor candidates in successional disputes and capitalize on their future territorial expansion.⁴⁶⁴

The CT alludes to several fosterage ties between the Uí Bhriain and the other aristocratic lineages in Thomond. Toirdhealbach Ó Briain of Clann Taidhg [7] was raised [*do*

461 PATTERSON, Nerys Thomas, **Cattle-lords and Clansmen: The Social Structure of Early Ireland**, Notre Dame: Notre Dame Press, 1994, p. 189.

462 PARKES, Peter, Celtic Fosterage: Adoptive Kinship and Clientage in Northwest Europe, **Comparative Studies in Society and History**, v. 48, n. 2, p. 359–395, 2006, p. 360.

463 *Ibid.*, p. 361,363.

464 *Ibid.*, p. 365.

hoiled] by his vassal, king Donnchad Ó Dheaghaigh of Cenél Fermaic.⁴⁶⁵ Diarmait Ó Briain, also of Clann Tadhg [15] had a bond of co-fosterage (*comaltas*) with Ó Echtigern, king of Uí Cernaigh, one of the kingdoms that made up *trícha cét* Uí mBlóid. His loyalty to Diarmait was important enough to compel him to side with Clann Tadhg even though “his *oireacht* was with the enemy in opposition”.⁴⁶⁶ Maccon Mac Conmara [6], king of Clann Chúillen, had a similar bond with Dirmait Ó Briain [15], “his *oireacht* [of Clann Chúillen] welcomed their heir, their noble lord, their heart and their foster-brother [*a comdalta*] and true fair king.”⁴⁶⁷ Síoda Mac Conmara [6], one of Maccon’s siblings, was foster-brother (*derbchomalta*) of one Ó Cinnedergáin, whose lineage is listed among Clann Chúillen’s subchiefdoms.⁴⁶⁸ Ó Cinnedergáin’s death in an ill-fated raid prompted Síoda to ravage the termon lands of the monastery of Moynoe, an action that would have grave consequences for the Mic Conmara.⁴⁶⁹ All of these examples conform to Parkes’ model of an “alternative social structure” with possible roots in clientship, as the parties in each of the agreements occupied different places in the political hierarchy and were bound by ties of vassalage. A slightly different example seems to have been that of Muirchertach mac Toirdhealbhach Ó Briain [14], who had a bond of fosterage with an external lineage. During an account of a 1313 campaign, we are told that Amláibaomh Ó Madadháin, of the Uí Madadháin kings of Sí

465 “agus cenél nuasal narmneimnech bFermaic óir is acu do hoiled agus do bésmúined Toirdelbach” O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 5.; “agus do ba derbchomalta do Thoirdelbach in Donnchad [Ó Dheaghaigh] sin.” *Ibid.*, p. 28.

466 “agus do tucatar ellach a oirechta d’ua Echtigern do bí ag buanfheitheam Diarmada tré derbcomaltas agus in tairecht an fochair a nescarat ina naghaidh.” O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 99.

467 “agus do fáiltigetar [aigenta] na noirecht agá fhaicsin a ndamhna agus a nuasaltigerna, a groide agus a gcomdalta agus a gcáimríg fire; Imthúsa Muirchertaigh menmnaigh cróda mílidlinmair mi-charcéillidh minicchathaigh meic tasdgaosmair tresruidchéillid Torrdelbaig: tar éis catha in chalaigh do críchnughadh, iar techt Diarmada delbsnuadhaigh dianéchaig dosneimnigh dergruathraigh dáimlinmair a derbráthar agus Miccon coscarneimnigh || a comalta agus a cuing catha agus énurraide a uasalmuintire fá’n am sin slán as na cumusgaib.” *Ibid.*, p. 71.

468 “agus do fregratar clann Mháilruanaid i Chormacáin na ruadhéigme sin; gur marbsat derbchomalta degShida do’n dianruathar sin, agus O Cinnedergáin fa sloinnd dó” *Ibid.*, p. 35. For a mention of the Uí Chinndergáin in a list of Meic Conmara vassals, cf. “áinfer as uaisle againn Lochlainn Maccon Sída seng. Ruaidrí is in dá Aod áirmem; scor nach fann grega gábaid. clann Chonmeda mórdálaig; Clann Taidg Ruaidrí na rád séim. Mathgamain is Tadhg táibréid; a bfaghla do tairg lám lib. is mairg tarla ina naigid Clann Ghillamochainne i gcéin. Gillamochainne a gcenn séin; do chongáin liga a lann lib. agus clann tSida shoilbir Clann Donnchaid do dianscáil droing. agus clann maith Máilsechloinn; clann rádglan nach fann fine. clann ágmar in Airchine Clann in Chláraig do chlecht áig. clann laochinnsaigtech Lorcaín; clann Ghillamáil glórda a ngal. agus clann mórdá Menman Ui Máildamna dergus cath. úi Allmaráin na nádrath; fir nach boighthim fá bladaib. sin [troid] choitcinn chomramaig Ui Slatra na sluag ngríbdá. is clann ágmar Aisida; rád glan a rann nach begán. is clann ágmar Artagán Clann Aille éirget do,n chath. is **clann Chinndergáin chliarach**” *Ibid.*, p. 97 (My stress).

469 For more about this episode, see “The alliance system during war time” below.

Anmchadha – an external kingdom north of Thomond – answered his military summons “by reason of his devotion to his foster-brother [*derbchomaltais*].⁴⁷⁰

Not every ruler was fortunate enough to possess powerful foster-kin. Even for those who were, a single alliance nurtured from one’s infancy was hardly enough to keep up with the vicissitudes of war and politics. When an urgent arrangement was called for, one possible course of action was the practice known as gossipred. This kind of bond is mentioned as *compartenitee* by the Statutes of Kilkenny in 1366, in which it is cited alongside marriages (*marriage*), fosterages (*nurture de enfantz*) and other ties as a number of contracts that English and Irish were forbidden to engage in.⁴⁷¹ The very fact it caught the attention of the Crown proves that it was a widespread practice among English magnates. Indeed, the Irish annals contain more mentions of gossipred arrangements between English and Irish persons than between two Irish individuals.⁴⁷² Originally, the term referred to the spiritual fosterage of a child after baptism, in which its mentions in the annals as *cairde Críst* or “alliance in Christ”.⁴⁷³ However, it seems to have mutated into an informal agreement between lords and clients, fulfilling an analogous role to fosterage.

A tie of gossipred appear to have tied Toirdhealbhach Ó Briain [7] with Domhnall Manntach Ó Conchobhair, king of Corcamruad in 1277. After being put on the run by the forces of Brian Ruad [6], Toirdhealbhach passed through Domhnall’s kingdom in search for help. The CT tells us they “knotted an enduring alliance [*buanchumann*] and friendship [*gcáirdes*] together.”⁴⁷⁴ A rather more infamous example was the tie binding Brian Ruad with Thomas de Clare. Some Irish annals mention they crafted an “alliance in Christ” [*carsisa*

470 “*táinc fós go buanaisech isin choméirge chobsaid chédna .i. Amláib aomh- glórach aignedghlan éscaid uasalréid oirbidnech mac Murchaid minuirghellaig mórdercaig í Madadháin cona mhersochraite mhór-chosraig; agus do bí áilges in imchosnama ag in mbuidin sin tré dúthracht a nderbchomaltais*”. O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 60–61.

471 “*Item ordine est et estable que nul aliance par marriage compartenitee nurtur de enfantz concubinaunce ou de caif ne de altre manere desormes soit fait prentre Engloyes et Irroies de vn partee ne de altre parte.* » STATUTES OF KILKENNY BERRY (Org.), **Statutes and Ordinances and Acts of the Parliament of Ireland, vol.1: King John to Henry V.**, p. 432.P.

472 One exception is Aedh Ó Flaithbertaig, who is mentioned as gossip partner to Donnchad Cairprech Ó Briain in 1225. Prior to 1365, however, gossipred is almost exclusively mentioned as a bond between and English and an Irish partner. This changes in the Late Medieval Period, as entries for 1365, 1463, 1514 and 1522 attest. See ANNALS OF CONNACHT. FREEMAN, A. Martin (Org.), **Annála Connacht: The Annals of Connacht.**, Dublin: Dublin Institute for Advanced Studies, 1944, p. 14, 326, 514, 626, 644.

473 E.g. : “*Ruaidri .H. Gádra, righ Slebhe Lughha, do mharbadh dá chairdes Críst fein, .i. Dáuid mac Ricaird Cuisín*” ANNALS OF LOCH CÉ. HENNESSY (Org.), **The Annals of Loch Cé. A Chronicle of Irish Affairs from A.D. 1014 to A.D. 1590.**, p. 408.

474 “*go ndechatar sin oidche d’ár gcionn d’fios Domnaill buainoig manntaig .i. í Chonchobair chorcamoruaid, mar a bfuair fáilte agus fircharadrad agus mar ar snadmatar a mbuanchumann agus a gcáirdes re chéile.*” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 8.

Crist] involving an oath on holy relics and a blood-covenant.⁴⁷⁵ Little did these warranties do to prevent de Clare from murdering his ally after a humiliating defeat against Clann Tadhg and the de Burgh.⁴⁷⁶ According to Parkes, Thomas and Brian Ruad's case may have been representative of the norm, as such pacts were very often broken, in contrast with the generally enduring ties of fosterage.⁴⁷⁷

Hostages

While bonds of kinship – real or spiritual – may have provided some assurance of obedience or compliance, the most common and effective way to obtain another lord's loyalty was the taking of hostages. Simms regarded the surrender of family members as “the most secure, if not the only method of ensuring a vassal's obedience”, without which “kingship became an empty farce”.⁴⁷⁸ The custody of one's relatives could be a powerful deterrent against betrayal and aggression. However, shrewd political actors could attempt to deceive the victorious party by ceding “evil” or “deceptive hostages” (*felbraighde*) – i.e. family members they were willing to sacrifice.⁴⁷⁹ Nevertheless, the willingness of a party to accept a non-crucial hostage – or, in some cases, to let the submitted agent choose at all – depended on the circumstances surrounding the pledge. A particularly strenuous submission, Simms theorizes, would substantively reduce the agency of the defeated party in negotiating the terms of the victors' demands.⁴⁸⁰ The afore-mentioned episode involving a negotiation between the *tánaiste* Mathgamhain Ó Briain [8] and Maccon Mac Conmara is an example of one such situation. Faced with a potentially hostile army, the king of Clann Chúillen had no

475 "Brian Ruad h. Briain ri Muman do gabail i mebail do mac Iarla Chlair, iar ndenam cardisa Crist doib & iar cur a fola a n-oensoithech & iar tabairt mind Muman & clocc & bachall da cheli doib, & a tarraing etir stetaib do mac an Iarla iar sin." AC 1277.2 FREEMAN (Org.), **Annála Connacht: The Annals of Connacht.**, p. 166.

476 “do médaig na briathra agus na bróngártha sin na mná ar dásacht in grodghoill, gur órdaig go brostaigtech drochcomairlech Brian do riagad nó do chrochad mar sásad dá mnái agus do Mág Muiris do bí isin tig in tráth sin; agus doriged go deithbirech in dianoided sin ar degBrian gan anacul.” O’GRADY (Org.), **Caithréim Thoirdealbhaigh**, p. 9.

477 PARKES, *Celtic Fosterage: Adoptive Kinship and Clientage in Northwest Europe*, p. 372–73.

478 SIMMS, Katherine, **From Kings to Warlords: The Changing Political Structure of Gaelic Ireland in the Later Middle Ages**, Boydell&Brewer. Woodbridge: Boydell & Brewer, 2000, p. 97.

479 E.g. “*Sluagh leisín Iarla i Tir Conaill cum Toirrdhelbaigh, gur'airg in tir, eter cill & tuaithe & co tainic i Connachtaibh co h-Oil Finn & co tucadur Connachta felbraighde do.*” ANNALS OF ULSTER MAC CARTHY, **Annála Uladh: Annals of Ulster otherwise Annála Senait, Annals of Senait.**, p. 374.

480 SIMMS, **From Kings to Warlords**, p. 98.

choice but surrender his most valuable hostages, whom the CT specifically calls *degbraigde* (lit. “excellent hostages”) in opposition to the *felbraighde*, or “deceptive” ones.⁴⁸¹

Hostages were commonly provided by vassals after the inauguration of a new king. Failure to provide a pledge could make one the target of a punitive expedition. According to the CT, when Brian Ruad took over Clonroad in 1277, Cenél Dunghaile and Uí Cormaic were quick to hand over hostages. However, Cenél Fermaic and Cenél Cualachta⁴⁸² refused to do so, and were promptly raided.⁴⁸³ Similarly, in 1311, according to the Annals of Inisfallen, “Thomond quickly handed over hostages & pledges to Diarmait of Clann Brian Ruad [16] and de Clare” when the former was installed king.⁴⁸⁴ Hostages were also usually demanded after military incursions as a means to ensure future compliance for those who received them – sometimes, as a gamble to stave off further aggression on those who granted them. Donnchad Mac Conmara [5] provides an example of the latter when, according to the CT, he handed over 14 hostages – including his own son – as a means of restoring good relations with king Donnchad [15] of Clann Taidhg.⁴⁸⁵ The Geraldine Maurice Fitz Maurice attempted the former when he invaded Thomond in 1273 and returned with hostages from Brian Ruad Ó Briain [7].⁴⁸⁶ These may be the same pledges mentioned by the pipe rolls from 1272-73, which state that Brian Ruad paid 76s 8d for the hostages of Thomond among a number of other dues.⁴⁸⁷

As the examples above indicate, English magnates were well aware of the power of hostages to enforce their will onto Irish kings. An indenture of agreement between Ralph Pippard and one “Eneagus Macmahan” made between 1284 and 1297 stipulates that the Macmahan should grant sixty cows and “appropriate hostages” (*obsides competentes*) so that

481 See above, p.27

482 I have been so far unable to locate this chiefdom.

483 “*tigit fós cenél nDúngaile agus úi Chormaic lena mbraigdib do chaomnad a grech agus a gcaomchonáich. léigter sceimelta sárnertmara sruthluatha agus dronga diana doedranda dianfoglacha leo fá chenélaib Cualachta agus Fermaic, gur crechad agus gur com loscad uile iat trí uaire i nénmís ar locad dá nuaislib techt i gcenn Briain.*” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 9.

484 “& Tuadmumu a cedoir do tabairt ghiall & braigdi do Diarmait & don Clarach” AI 1311.5 MAC AIRT (Org.), **The Annals of Inisfallen**, p. 406. (Author’s translation).

485 “*agus is é líon do togh O Briain do braigdib .i. ceithre braigde dég do degmaithib na nuasalairecht ar éntsligid.*” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 37.

486 “*Morsluagad la Mac Muris Mac Gerailt a Tuadmumain cur gab braigti & nert ar h. mBriain.*” AC 1273.5 FREEMAN (Org.), **Annála Connacht: The Annals of Connacht.**, p. 160.

487 **The 36th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, Dublin: Alex Thom & Co., 1904, p. 25.

the terms would be ratified.⁴⁸⁸ No such indenture survive between the de Clares and the Irish of Thomond, if they were made at all. However, a letter patent dated February 11th 1276, in which Edward I orders the justiciar to cede him custody of the hostages of Thomond soon after granting him the province itself is a tacit attestation that control over them was necessary to ensuring compliance from the Uí Bhriain.⁴⁸⁹ The Crown was well aware that nothing less would convince the Irish kings to fall in line.

Partition and foreign intervention

Between 1276 and 1318, the kings from Clann Tadhg and Clann Brian Ruad generally attempted to seize the power for themselves and expel their rival claimants and allies. However, in at least three different occasions the belligerent factions were compelled to reach a compromise and partition the kingdom of Thomond between themselves.

In 1281, according to the date in the Annals of Inisfallen, the king of Desmond Domhnall Mac Carthaigh, came over to Thomond to convince Toirdhealbhach [9] of Clann Tadhg and Donnchad [11] of Clann Brian Ruad to divide the kingdom between them and stop them from “destroying Ireland as well as their own wealth”⁴⁹⁰ Donnchad, the CT adds, was granted the western half; Toirdhealbhach, the eastern.⁴⁹¹ The treaty did to not prevent the two kings from going at each other’s throats, but seems to have been in effect until 1284, when, after Donnchad’s murder the previous year, the CT states that Toirdhealbhach “seized [...] the kingship again without partition or boundary to reach”.⁴⁹²

488 “*Dum idem Enegus penes dictum Dom. Radulfum fideliter se gesserit pro qua quidem convencione dictus E. dedit Domino R. sexaginta vaccas et obsides competentes ut provisum est inter partes predictas.*” Curtis, p. 106–07 n. 268.

489 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1252-1284**, p. 217 n.1197. Cal Doc Ire II n. 1197 p. 217

490 “*acus gur obradar a lan d’ulc du denumh othu gu tanyg righ Dessuman acus comharlighteoir h-Erean, gur chuir teacta acus scribinn h-uodha da n-inssagaidh da taisbeanadh doib gu rabadar i’ cur h-Érann acus a nidhchi féin amudhu, .i. Domnall Mc. Kartaigh, gur gabssatssumh uli du laimh a comarli do denamh, gurub an sen tanig in righ tar s-Sinainn fu fuoidh gu Tuodhmumhain acus gu rabi ann tanaisti do tri seactmainimh*” “AI 1281.7 MAC AIRT (Org.), **The Annals of Inisfallen**, p. 378.

491 “*in leth taobdaingen tráchtglégeal tonn geránach thiar fá chomhair a deghórdaighthi do Dondchadh, agus an leth toirthech triathimda taobfadréidh tromtidlaictech tresinn saighthech tair fá tigernas Tordelbaigh.*” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 16.

492 “*Rogabstar in réidhghlanbrethach rádhcertbriathrach rathmar chródha reanngormneimnech ruatharcrechach roscgruadhchorcra rinnabradghlan ruithenmhilla righThorrdelbach in righi arís gan roinn cóigcrichais dá rochtain.*” *Ibid.*, p. 23. The passage follows the murder of Donnchad by the entourage of Toirdhealbhaigh, which the CT dates 1283. The Annals of Inisfallen and the Annals of the Four Masters, however, date the assassination 1284. The CT further states, somewhat puzzlingly, that Donnchad “had for

The second case of partition took place in 1313, when “an assembly was made between the provinces and a partition between the joint kings”, Muirchertach [14] of Clann Tadhg and Donnchad [11] of Clann Brian Rua.⁴⁹³ The terms were more beneficial to Muirchertach, who took hold of Uí Cormaic and Clonroad in addition to his allotted half of Thomond.⁴⁹⁴ Little this did to quench his appetite for conquest, as he mounted an expedition against Clann Brian Rua and its allies as soon as Richard de Clare left for England in 1314.⁴⁹⁵

A third example of partition is mentioned exclusively by the CT. It purportedly took place in 1312, after a protracted war which left both sides “in [a] destructive, troubled, restless arrangement” that lasted until “a meeting was jointly announced by the foreign knights of Connacht and the foreigners of bright Munster, i.e. between the earl of Ulster and de Clare”.⁴⁹⁶ However, the division was only observed “from around bright *lúnasa* [August 1st] to when *samhain* [November 1st] was looked past”.⁴⁹⁷ The fact that this episode is missing from the annals – even though it involved the participation of magnates active in the national level – may lead us to question the reliability of this part of CT’s narrative. Nevertheless, it is also possible that the treaty was simply too short-lived to have had any meaningful impact.

The ephemeral nature of these agreements and the fact that they did not succeed in staving off violence suggest that partition was never going to be a long-term solution for the war between the Uí Bhriain. Nevertheless, these episodes are united by the common thread of an intervention by external political actors. In this, they are not the sole examples. In 1278, Cúmeda Mac Conmara [2], the king of Clann Chúillen, travelled to Bunratty to meet with Thomas de Clare under a safe-conduct by the Geraldines.⁴⁹⁸ In 1315, Richard de Burgh [7]

seven years ruled jointly with Toirdhealbhagh” (*ar mbeith secht mblíadna i gcomflaithes re Toirrdelbach an bliadain d’aois Christ.1283*) *Ibid.*

493 “*gu ndernadh comdhál itir na cúigedaib agus comraind itir na caomrighaib .i. itir Muircertach mórgnimach míledrod micharbind mac Torrdelbaig triathcéillidhe tuathchonáich, agus Dondchadh dommeirgech dergruathrach mac dehuirghlech Domnaill*”. O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 77–78. “*Item eodem anno terra diuisa est inter praedictos Mauricum & Donatum & pax facta. AI 1313.5* MAC AIRT (Org.), **The Annals of Inisfallen**, p. 416.

494 “*agus dob é seo corughadh na comrainde sin .i. chuain réidhfairsing rígturcartach ruithenmór rám[ff]ada agus í lethanCormaic ina lenmainsein d’imarraid ag uasalMuircertach, agus gach re tricha do na tuathaib ó sin amach ag na míledhaib.*” O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 78.

495 WESTROPP, Thomas Johnson, The Normans in Thomond. Part III., 1313-1318 (Continued), **The Journal of the Royal Society of Antiquaries of Ireland**, v. 1, n. 6, p. 462–472, 1891, p. 463.

496 “*Do bátar leith ar leith go héchtach imsnimach nemsuaimnech ar in órduagad sin ; nó gur comfuagrad coinne ag na cniocht-gallaib Connacht agus ag gallaib glanMuman .i. itir iarla Ulad agus in árdChlárach*” O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 56. (Author’s translation)

497 “*Do bí in chomroinn sin ag na cáimrígáib ina gcertinad ó ghaire na glanlughnasa go ndeachaid in tsamain secha*” (Author’s translation) *Ibid.*, p. 57.

498 “*go dtáinic chucu Cúmeda ar maidin ar chomairche chlainne gnimáithesaige Gherailt go tig in Chláraig do’n chur sin*” *Ibid.*, p. 12.

provided a similar safe-conduct to Ó Seancháin, king of Uí Ronghaile, to travel to Bunratty and make peace with de Clare.⁴⁹⁹ In 1318, it was “de Clare’s wife, sons and family [i.e. the Geraldines of Desmond]” who provided sanctuary to Maccon Mac Conmara [6], who visited Bunratty as Muirchertach Ó Briain’s [14] representative.⁵⁰⁰ In 1281, Thomas de Clare joined forces with the de Burghs, the Butlers and the Geraldines and invaded Toirdhealbhach Ó Briain [9]’s lands.⁵⁰¹ Upon acknowledging he had no chances of resisting, Toirdhealbhach sent his brother Domhnall [10] and his vassal Cumea Mac Conmara [2] to offer terms “under the sanctuary of the earl of Ulster and the protection of the chief Butler”.⁵⁰² The assurance wasn’t merely for show. When de Clare ordered his guards to violate the safe-conduct, imprisoning the delegates, “the earl became angry at this utterance, and Butler swelled at the mention of shackling [those under] protection.”⁵⁰³ de Clare eventually relented, and Toirdhealbhach got his half of Thomond back in exchange for four hostages.⁵⁰⁴

While the CT recurrently portrays these English magnates as mediators, they could also intervene against Clann Tadhg’s interests if the situation demanded. In 1287, when the death of Thomas de Clare left the English lands in Thomond unprotected, Toirdhealbhach led a destructive raid across Tradree and into the Butler lands across the Shannon. The earl of Ulster, Richard de Burgh [7], intervened, and the Thomond king was persuaded to return home. “And this high king would have been king of Ireland” the CT laments “had not the warnings of the bright earl – forceful, sweetly-voiced and partial to foreigners – forbidden Toirdhealbhach to lead that expedition”.⁵⁰⁵ According to the CT, earl’s diplomatic skills were

499 *"agus táinic O Sencáin ar saorcomairgi Ricaird binnglóraigh brethfhoisdinigh bélfirindigh a Búrc hi tech in Cláraigh do'n cur sin; agus do snaidmedh sidh i Sencáin ag na slu || aghaib, agus do hórdaighit a uasalbraighde, agus tugadh lá re comall do'n coinde sin". Ibid., p. 86.*

500 *"do chuaid mac Conmara a hucht i Briain ar chomairce mná agus mic agus muinntire in Chláraig do taircsin comha do'n Chlárach". Ibid. (Author's translation).*

501 *"gus nír cian do'n Clárach na comhnaide ic coiméd in choitchennais dá chaomógláchaib, in uair do iarr agus do fhuagair comsluaighedh coitcenn tré chombáigh ar gallaib Erenn uile ar énslighidh, go nimad do gasradaib Gháidel re [a] cois icá coimidecht, uair do bí Banba arna borbcengal. agus is amhlaid seo do órdaighetar tír Tordelbaig do taoblomrad .i. in tiarla agus in tardBhuitillér co nuaislib Laigen agus Ulad agus uasalConnacht na bfál timcill im tuaiscert in tíre dá tréncóiméd; agus Mac Gerailt agus in gallChlárach co ngasradaib gall agus gáidel dá cúigedh Muman ina mórtimcell do toighecht i ndeiscert in tíre dá tuathrodrébadh." Ibid., p. 16–17.*

502 *"ar comairge iarla Ulad agus ar enech in ardBuitilléir". Ibid., p. 17. (Author's translation)*

503 *"do fergaigh in tiarla do'n uirghell sin, agus do gab borrfad in Buitillér tré imrádh a chomairce do cuibriugad"" Ibid. (Author's translation)*

504 *"co nerna[dh] írna ar aimréidhe d'feraib Erenn uile san inadh sin, nó gur éirig cond na céille co righda dá réidhiughad .i. iarla uasalgnímach Ulad; agus rob é órdughad in iarla: ceathrar braighet do'n borbClárach, agus leth in tíre aris do righThordelbach; agus do cuaidh cách dá críchaib comnaidhe do na cnichtghallaib." Ibid.*

505 *"agus do ba rí Eirenn do'n dul sin in táirdrí acht muna biadh comairleda gusmara guthmilse gallbadhacha in ghlaniarla do thoirmesc Toirdelbach do'n turas sin." Ibid., p. 26.*

put to the test yet again in 1298, when Toirdhealbhach mounted an attack on Bunratty castle itself. The starved out garrison was about to yield when de Burgh intervened once more and convinced the Irish king to lift the siege.⁵⁰⁶

The English exchequer and chancery records show us that the English were willing to go much further than warnings if Toirdhealbhach decided to push his luck. From 1281, the same year in which Domhnall Mac Carthaigh purportedly brokered peace between Clann Tadhg and Clann Brian Ruad, the exchequer records indicates payments to Theobald Butler, lord of Ormond, in regards to £128 16s 2d for expenses incurred in pacifying the king's enemies in Thomond.⁵⁰⁷ "We may infer" Orpen wryly noted "that the settlement was really the result of the intervention of the government".⁵⁰⁸ In 1298, when Toirdhealbhach attacked Bunratty castle, the justiciar of Ireland, John Wogan, personally led an army to lift the siege.⁵⁰⁹ In 1287, when Toirdhealbhach made his foray into Butler lands across the Shannon, the Crown's response costed him even more dearly. The pipe rolls mention services owed to an "army of Cashel", suggesting the town, which lay at the heart of the Butler lordship, was the assembly point for the royal forces.⁵¹⁰ A parliamentary petition from a few years later (1289) reveals that Stephen Fulborne, bishop of Waterford and justiciar of Ireland, was present (and possibly in charge) of the expedition.⁵¹¹ Still according to the pipe rolls, Toirdhealbhach's audacity cost him 600 marks (£400) in reparation, in addition to four hostages including his son and presumed heir, Donnchad [13].⁵¹² Custody eventually fell upon Richard de Burgh, and Donnchad was listed as a hostage in Bunratty castle when the Crown agreed to return it for an additional £100.⁵¹³

506 *"Is do'n dula sin do órdaig Toirdelbach in triathobair nár hórdaiged i nEirinn [a] hintsamail roime riam .i. cládroiched ciumasréid fiarláid na gaible mara gusin tráig; agus ro ba chorrtha in caislén ó na cóirigtib sin. tigit comairleda in iarla do'n dula sin d'innsaigid Thoirdelbaig dá thoirmesc; agus ó'n ló do gab do láim laochToirdelbach do chomairliugad, ro fágaib in caislén ar in órdugad sin"* *Ibid.*, p. 30. The dates added by a later hand in the CT's manuscripts provides the erroneous date of 1305 of the episode. This is contradicted by the rolls of issue of the Irish exchequer, which lists a payment of £100 for wages of soldiers sent to lift the siege in Bunratty. Cf. CONNOLLY, Philomena (Org.), **Irish Exchequer Payments 1270-1446**, Dublin: Irish Manuscripts Commission, 1998, p. 142.

507 CONNOLLY (Org.), **Irish Exchequer Payments 1270-1446**, p. 63, 68, 70.

508 ORPEN, **Ireland Under the Normans, Vol.4**, p. 73.

509 CONNOLLY (Org.), **Irish Exchequer Payments 1270-1446**, p. 142.; **The 38th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, Dublin: Alexander Thom & Co., 1906, p. 42.

510 **The 37th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, Dublin: Alex Thom & Co., 1905, p. 24,27.

511 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1285-1292**, p. 251.

512 **The 37th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 33.

513 *Ibid.*, p. 51.

As Robin Frame demonstrated, this pattern of reaction was deliberately fostered by the justiciarship of John Wogan (1295-1313). Burdened by requests of soldiers and provisions to supply English armies fighting in Scotland and the Continent, Wogan strove to reduce the military involvement of the Dublin administration and delegate the control of domestic operations to local magnates.⁵¹⁴ To ensure their compliance, he took several measures to defuse the rivalry that existed between the most important Anglo-Irish lineages, including arranging a settlement between the Geraldines and the de Burghs in 1298, who had been mired in an entrenched – and often violent – conflict since at least a decade earlier.⁵¹⁵ In 1311, when William de Burgh [8] was captured by Richard de Clare while fighting on behalf of Clann Tadhg, Wogan ordered fellow magnates Edmund Butler, John fitz Thomas, Maurice Rocheford and Robert Bagot to “prohibit Richard and Donatus [i.e. Donnchad Ó Briain [13]] from continuing that war and cause them to keep the peace for life.”⁵¹⁶ On occasion, the justiciar also took matters into his own hands, arbitrating a settlement between Donnchad and the citizens of Limerick in 1308⁵¹⁷ and travelling on expedition to Munster in 1310 “to settle discords between different persons in Munster, and bring rebels to justice”.⁵¹⁸

Frame criticized these measures as a failure of government inefficiency, demonstrating how the administration “could exert [no] powerful influence” in Thomond and was limited to “[the role] of mediator, and usually a remote one”.⁵¹⁹ Still, they were sufficient, at the very least, to limit the Uí Bhriain’s theatre of operations to the confines of Thomond. The goddess of Ireland may have had a point when she hinted to Toirdhealbhach Ó Briain that the age of mighty Thomond kings who freely exerted their will without the assent from the English was a thing of the past:

“They noticed a proud, noble, wondrous, lone woman of ravishing countenance who approached them. [...] “The sovereignty of Ireland is my name, o high king” said the woman “and had you not turned

514 FRAME, *The Dublin Government and Gaelic Ireland: the Making of War and the Making of Peace in the Lordship 1272-1361*, p. 122.

515 *Ibid.*, p. 123. ORPEN, *Ireland Under the Normans, Vol.4*, p. 119.

516 CROOKS, P. (Ed.) *CIRCLE: A Calendar of Irish Chancery Letters c. 1244 – 1509*. Patent Roll 4 Edward II n. 84. Available at: <<https://chancery.tcd.ie/roll/4-Edward-II/patent>> (Access date 05/11/2020)

517 WOOD, Herbert; LANGMAN, Albert E.; GRIFFITH, Margaret C. (Orgs.), *Calendar of the Justiciary Rolls or Proceedings in the Court of the Justiciar of Ireland, I to VII Years of Edward II*, Dublin: Stationery Office, 1905, p. 2–3.

518 *The 39th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland*, Dublin: Alex Thom & Co., 1907, p. 46.

519 FRAME, *The Dublin Government and Gaelic Ireland: the Making of War and the Making of Peace in the Lordship 1272-1361*, p. 153–54.

back at the behest of the foreigners in this expedition, I would be yours in this time without exceptions”⁵²⁰

3.4. The Making of War

The fortunes of the Dublin government and the de Clares in the late 13th and 14th centuries are illustrative of an issue that plagued English magnates in Ireland more generally: the Irish were tenacious fighters and difficult foes to beat, especially when confronted in their homelands. As I discussed in the previous chapter– and will return to below⁵²¹ – the nature of the Irish terrain and patterns of settlements played a crucial role in these military outcomes. The abundance of mires and woods and the widespread practice of transhumance agriculture encouraged the deployment of lightly armoured, highly mobile forces, as well as the development of hit-and-run tactics that put the English armies to the test. As Catalan knight Ramón de Perellós remarked during a visit to Ireland in 1397, “ [the Irish] way of making war is like that of the Saracens”⁵²² and they themselves, “when the pastures are consumed, [...] decamp like the bedouins of Barbary and the land of the sultan and move their town all go off at once.”⁵²³ French historian Jean Froissart includes a similar description in his *Chroniques*, telling us of an Englishman called Henry Cristede who argued that “Ireland was one of the worst countries in the world to wage war with and to subjugate, for it is strangely and savagely made of [...] inhabitable places” and there was not a town to be found.⁵²⁴

520 “*atchonncatar in n n n i nuallaig nadhn raig ningn thaig naghaidch im d  ninnsaigid; [...] flaithes Eirenn m'ainmsi a  irdr ig, ar in ingen; agus muna nimp dai s allmaraig thusa do'n toisc so, do biadh || flaithes Eirenn agat re haimsir gan uiresbaid*” O'GRADY (Org.), **Caithr im Thoirdealbhaigh**, p. 27..(Author's translation)

521 See 3.5. ‘Economy and logistics’, below.

522 “*lur manera de guerrejar  s semblant an aquella dels sarrazins*” MIQUEL Y PLANAS, R (Org.), **Llegendes de l'Altra Vida**, Barcelona: Fidel Gir , 1914, p. 144. Translation from MAC AN BHAIRD, Alan (Org.), **The Journey of Viscount Ramon De Perell s to Saint Patrick's Purgatory**, Cork: CELT, 2012, p. 8.

523 “*com los herbatges se'n van, ayssi se mudan a la manera de les aurenets de Barbaria e de la terra del sold ; ayssi fan ells en mudant lur vila, e van totz ensemps.*” MIQUEL Y PLANAS (Org.), **Llegendes de l'Altra Vida**, p. 146. Translation from MAC AN BHAIRD (Org.), **The Journey of Viscount Ramon De Perell s to Saint Patrick's Purgatory**, p. 9.

524 “*Yrlande est ung des mauvais pays du monde   guerroyer et   soubmettre, car il est fourm  estrangement et sauvagement de haultes forests et de grosses yaues, de crolieres et de lieux inhabitables, et n'y scet-on comment entrer pour euls porter dommage et faire guerre, car, quant ils veulent, on n'y scet   qui parler, ne on n'y trouve nulle ville.*” DE LETTENHOVE, Kervyn; CONSTANTIN, Joseph Marie Bruno; SCHELER, Auguste (Orgs.), **Oeuvres de Froissart; publi es avec les variantes des divers manuscrits, Chroniques, Tome Quinzi me**, Bruxelles: V. Devaux et Cie, 1867, p. 169.

The most effective counter to Irish mobility – heavy incastellation – demanded copious resources that the Crown and its magnates did not always have at their disposal.⁵²⁵ It took a royal service – the collection of military dues of all of its subjects in Ireland – for the Dublin government to raise funds on behalf of Thomas de Clare for the construction of the castle of Quin, in Thomond.⁵²⁶ This did little to prevent the fortress from being destroyed soon after its construction and no royal funds were given to rebuild it. Without the means at hand to quickly build new castles and repair damaged ones, it was paramount that English magnates reacted – and adapted – to the Irish way of making war.

How different were these insular strategies from the ones in vogue in the rest of Europe? It is ironic, given the English's less than stellar military record in the period, that the authors who most vehemently emphasized the contrasts between the Irish and English on the battlefield were also very keen in underscoring how backwards and savage Gaelic soldiers were. The anonymous French author of the 13th century *Historie des Ducs de Normandie et des Rois d'Angleterre* claimed that the king Cathal Crobhderg Ó Conchobhair of Connacht (d.1224) became the laughing stock of the English because “he did not know how to ride a horse with a saddle”.⁵²⁷ Perellós observed that the Irish “wear neither leggings nor shoes nor britches but wear their spurs on their bare heels”.⁵²⁸ In curter terms, Giraldus Cambrensis, declared that they “go to war naked and unarmed”.⁵²⁹

These descriptions should be taken with a great pinch of salt, even when their authors do not seem to be engaging in hyperbole. As Norman Housley observed, military commanders across the Medieval West displayed a “well-known and justifiable reluctance of [...] risk engaging in battle,” notwithstanding the occasional battle-seeking behaviour of a Philip Augustus at Bouvines or an Edward I at Falkirk.⁵³⁰ Combat always involved a measure of luck, regardless of whether it was fought by skirmishers hiding in the woods or by elite

525 FRAME, **The Dublin Government and Gaelic Ireland: the Making of War and the Making of Peace in the Lordship 1272-1361**, p. 83.

526 *Ibid.*, p. 114 note 140.

527 “*Li rois de Counoc l'en menchia ; puis fist oster la siele et monta sus tout à ars, car il ne savoit chevaucier à tout siele ; et si faitment chevaucha-il une grant piece delès le roi Jehen*” MICHEL, F. (Org.), **Historie des Ducs de Normandie et des Rois D'Angleterre**, Paris: Societé de l'Histoire de France, 1840, p. 112.

528 *e no portan caussas, ny sabatas, ny braguas, mas se causan los [e]sperons sobre los talons nuus.* MIQUEL Y PLANAS (Org.), **Llegendes de l'Altra Vida**, p. 145. Translated by MAC AN BHAIRD (Org.), **The Journey of Viscount Ramon De Perellós to Saint Patrick's Purgatory**, p. 8.

529 “*nudi et inermes ad bella procedunt.*” BREWER; DIMOCK; WARNER (Orgs.), **Giraldi Cambrensis opera, Vol. V**, p. 150.

530 HOUSLEY, Norman, European Warfare, c.1200-1320, in: KEEN, Maurice (Org.), **Medieval Warfare: A History**, Illustrated edition. Oxford; New York: Oxford University Press, 1999, p. 113–135. Medieval Warfare, keen, p. 113

man-at-arms backed by siege engines. Moreover, the rudimentary means available to pre-modern armies to communicate during battles meant that leaders had limited control over their battles once the melee started. Any number of factors, from rumours that a commander had been killed (which almost cost the Normans the victory at Hastings in 1066) to incidents of friendly fire (as happened in the Battle of Barnet in 1471, leading to a Yorkist victory) could turn an army into a rout. There was nothing intrinsically ‘Irish’ in the caution exercised by Gaelic armies, and the English were just as able to deploy appropriate troops and execute hit-and-run tactics if the situation demanded – as did the Crusader States with the turcoples and the Iberian kingdoms with the jinetes in their fights against Muslim armies.

English sources contain plenty of references to Irish *kerms* (from the Irish *ceithern*, meaning a band of foot soldiers) under the service of English magnates in Ireland.⁵³¹ These armies also fielded a specific kind of light mounted infantryman known as *hobelarius*, who were fast enough to catch up with Irish warbands and stage hit-and-run attacks of their own. Many of these warriors were recruited locally. An account of wages paid to an army led by the deputy justiciar William de Burgh in 1308 lists only 16 *equis coopertis* (men-at-arms)⁵³² to 161 *hobelarii* and 628 *pedites* (foot soldiers).⁵³³ These numbers were far from unique. As Robin Frame noticed, whereas in English armies elsewhere the proportion of *equis coopertis* to *hobelarii* tended to be 1:1, in Ireland the average was 4.5: 1.⁵³⁴ The reliance on Irish soldiers was certainly one of the reasons for the contrast. Of the 805 men on de Burgh’s army in 1308, 450 (59%) were under control of commanders with Irish names. Frame found similarly high (proportions) in other royal armies. In 1348, 43% of soldiers in pay in one of the justiciar’s army answered to Irish leaders. In 1353, the proportion in a different army was as high as 57%.⁵³⁵

The CT unequivocally suggest that the lords of Thomond fielded mixed-culture armies from the moment they first settled in the region. “After banishing the old inhabitants that existed in territory of Tradree” the tract tells us “the hasty de Clare brought his new

531 See, section 3.5. “Economy and logistics” below

532 The term literally means “covered horse”, in reference of the caparisons worn by the mounts of men-at-arms.

533 CONNOLLY, Philomena, An Account of Military Expenditure in Leinster, 1308, **Analecta Hibernica**, n. 30, p. 3–5, 1982.

534 FRAME, Robin, Military Service in the Lordship of Ireland, 1290-1360: Institutions and Society on the Anglo-Gaelic Frontier, *in: Ireland and Britain 1170- 1450*, London/Rio Grande: The Hambledon Press, 1998, p. 290.. 290

535 *Ibid.*, p. 295.

English as well as the impetuous kerns of the Irish to occupy that land together”.⁵³⁶ In a later passage, he mobilized an army by mustering his “knights and battle barons” as well as the “nobles of the Irish”.⁵³⁷ The force assembled for an expedition known as the Hosting of Fertane consisted of “[Thomas] de Clare with his cavalry battle and Donnchadh Ó Briain [11] with his fierce army of spear-armed infantrymen”.⁵³⁸ The description is echoed by later passages, when his son Richard “with his batallions, Diarmaid Ó Brian [16] with his kinsmen and the two Clann Chuillén with their chief sept” razed Cenél Fermaic.⁵³⁹ and yet again in an episode a year later, when “de Clare with his battles, Irish soldiers (*ghasradaib*) and English infantrymen (*gallchoisidedh*)” marched to meet de Burgh and Clann Taidhg in battle.⁵⁴⁰ When, fighting against de Clare in Dysert O’Dea, Feidhlim Ó Conchobhair spotted the army of his ally Muirchertach Ó Briain [14] and thought they were English reinforcements, his confusion may have been due to more than the heat of battle alone.⁵⁴¹ As Katherine Simms noticed, the excerpt suggests that English and Irish armies were nearly indistinguishable in equipment and composition.⁵⁴²

The English were not only well acquainted with Irish troops and tactics, but may possibly have had a hand in their very development. While James Lydon once called the *hobelarius* “an Irish contribution to medieval warfare”, Robert Jones believes they might have originated from the *muntator*, a similar type of soldier used by the English against the Welsh in the 11th and 12th centuries.⁵⁴³ *Muntatores* are mentioned in the records of Shropshire and Staffordshire, two counties that provided large amounts of settlers for the English colony in Ireland. “It is not inconceivable” argues Jones “that these marcher nobles [...] introduced

536 “*agus ar ndíbirt na senfhóirne do bí i bfoinn Tradraige, tuc in grodChlárach do ghlasghallaib agus do diancheiternaib gáidel re háitiugad in roinn sin do'n tír uile.*” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 7. (Author’s translation).

537 “*Imthúsa in Chláraig: do tinóil itir chníoht agus chathbarúin agus cháimiarla gasrad ngall ngelsciathach go bun Raite ráith dígainn dá innsaigid. tángatar uaisle a fhinngáidel dá innsaigid mar in gcédna isin inad.*” *Ibid.*, p. 11.

538 “*uair táinic in Clárach cona cathmarcluag, agus Donnchadh O Briain cona borbsluagaib cletharmacha coisidhedh.*” *Ibid.*, p. 15. (Author’s translation).

539 “*Isin luan i ndiaid na himresna sin do chuaid in Clárach cona chathsluagaib, agus Diarmaid O Briain cona bhráithrib, agus dá chloinn Chuilén cona gcinedachaib, gur loiscetar agus gur lomairgetar cenél bflaithimda bFermaic.*” *Ibid.*, p. 45. (Author’s translation)

540 “*Imthúsa in Chláraig cona mharesluagaib agus cona ghasradaib Gáidel agus gallchoisidedh.*” *Ibid.*

541 “*adubairt Feidlimid go fichguasach agá bfaicsin uada: truag sin, ar sé, is mó léigmidne in tiarmar begsluaig so na ngáidel tuille cabartha dáil ná d’ár naimdib. gided ó nach éidir dúinn dul ó’n dianimnid so do bríg nár chuibe ingabáil do dénam, díglam sinn féin go dingbála ar ár ndergnaimdib innus nach biadh lín catha díob d’ár néis fá chomair ár ndegcharat.*” *Ibid.*, p. 144.

542 SIMMS, Katherine, The Battle of Dysert O’Dea and the Gaelic Resurgence in Thomond, **Dal gCais**, v. 5, p. 59–66, 1979.

543 JONES, Robert, Re-thinking the origins of the “Irish” hobelar, **Cardiff Historical Papers**, v. I, p. 1–20, 2008.P. 8

[the *muntator*] to Ireland to deal with the similar situation there.”⁵⁴⁴ The author points out that most references to deployment of cavalry by the Irish come from the 14th and 15th centuries, which leads him to surmise that they were an English introduction.

Cultural exchanges of this sort also happened in the opposite direction. According to the CT, the military kit of the soldiers of Donnchad Mac Conmara consisted of “embroidered crimson *cotún* [a padded aketon], shining habergeons, great shining blades, fierce whirling spears.”⁵⁴⁵ Donnchad’s own armament included a “strong, well-shaped *cotún*” extending “from his [...] throat to the top of his knees”⁵⁴⁶, a “habergeon of interlaced glittering rings”⁵⁴⁷, a “strong-plated, round-edged helmet”⁵⁴⁸, a sword, a javelin and a spear.⁵⁴⁹ This is far cry from the naked, unarmed men described by Giraldus Cambresis. These soldiers would prove more than a match to English armies, especially if they faced off against a mixed force with large contingents of kerns and *hobelarii*. The combination of a padded aketon, mail and a rounded helmet (possibly a visorless bascinet) bears a striking similarity to the depictions of galloglass in the effigies in the Priory of St. Mary, Roscommon and the possibly early 16th effigy of William de Burgh (†1205 or 1206) at Ballinakill Abbey, co. Galway. (figs. 30 and 31) Galloglass – from the Irish *gall óglaigh*, “foreign warriors” – were soldiers of Scottish descent who first settled in Ireland in the mid-13th century and served as mercenaries and military advisors in Irish armies until the 17th century.⁵⁵⁰

544 *Ibid.*, p. 8.

545 “a *gcotún gcrabhorcra*, a *lúirech loinmerghlan*, a *lann lasarmór*, a *gcráisech gcuartaichbéil*, agus ag athchur a nech tar a nais dá naradaib ó nach raib a naire re himgabáil a dtáisig” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 40.

546 “tugadh ar dtús a uasaléided dá innsaigid .i. *cotún daingen degchumtha* [...] ó ichtar a mhaothbrágrad minchorcra go mullach a ghlún ngasda nglégelchorr.” *Ibid.*, p. 39.

547 “do gabadh uimesiun ar uachtar in inair sin lúirech lántrabraid lúbghlégel” *Ibid.*

548 “do gab clogat clárdhaingen ciumaschruinn” *Ibid.*

549 “do gabastar a chloidem [...] do gabastar a gha [...] tarraid sé a chráisech” *Ibid.*

550 See DUFFY, Sean (Org.), **The World of the Galloglass: Kings, Warlords and Warriors in Ireland and Scotland, 1200-1600**, Dublin: Four Courts Press, 2016. For the most comprehensive study of these warriors available in the literature.



Figure 30: 15th century depictions of galloglass from the Dominican Priory of St. Mary, co. Roscommon. Photograph by Edwin Rae.⁵⁵¹

551 Available at: <<http://hdl.handle.net/2262/39976>> Access Date: 5 Nov. 2020



Figure 31: Figure 31: Early 16th century effigy of William de Burgh (†1205 or 1206) at Ballinakill Abbey, co. Galway. Photograph by Mike Searle⁵⁵²

Galloglass were not yet active in Thomond during the wars of 1276-1318, although they took part in conflicts in other parts of Ireland, notably in Ulster.⁵⁵³ However, the CT suggests the Irish recruited the services of other soldiers of English or otherwise foreign descent. The text makes one reference to the Condons or de Cantetons (*na cundúnaigh*), an English family, and five to the Comyns, a lineage of Norman origin who became important Scottish magnates and played a major role in the First Scottish War of Independence. John Comyn “the Red” of Badenoch was a claimant to the Scottish throne and a rival of Robert de Bruce, by whose hand he was murdered in 1306.⁵⁵⁴ Not much is known of the origin of the Comyns active in Thomond. It is possible they belonged to a different branch of the family that settled in Ireland just after the Invasion, although some English families in the country – such as the de Marisco – also had connections with the Scottish branch.⁵⁵⁵ Katherine Simms and Luke McInerney believe both the Comyns and the Condons (who were later mentioned fighting for the de Clares in 1318⁵⁵⁶) were serving the kings of Thomond as mercenaries.⁵⁵⁷ McInerney fleshes out his hypothesis in a passage that describes Comyn forces being “urgently assembled with *tuarastal*”, a word that has its origins in a gift of submission given by Irish kings to their subjects, but that by the 14th century was usually employed with the meaning of “wages”.⁵⁵⁸ Furthermore, a 1615 survey of the barony of Ibrickan, in West Clare, reveals that some Comyns were settled in the region by the early 17th century.⁵⁵⁹ McInerney believes this settlement dates from shortly after the wars of 1276-1318, in which the family

552 Available at: < <https://www.geograph.ie/photo/5829681> > (Access Date: 5 Nov. 2020)

553 MCINERNEY, Luke, The Galloglass of Thomond: Gallóglaigh Thuadhmhúhain, **North Munster Antiquarian Journal**, v. 55, p. 21–45, 2015, p. 23.

554 GRANT, Alexander, The Death of John Comyn: What Was Going On?, **The Scottish Historical Review**, v. 86, n. 2, p. 176–224, 2007.

555 ST. JOHN BROOKS, E., The Early Irish Comyns, **The Journal of the Royal Society of Antiquaries of Ireland**, v. 86, n. 2, p. 170–186, 1956, p. 174.

556 John Clyn mentions a Condon among the English casualties in the Battle of Dysert O’Dea.

557 SIMMS, The Battle of Dysert O’Dea and the Gaelic Resurgence in Thomond.

558 See 3.5. “Economy and logistics” below.

559 MCINERNEY, Luke, The Earl of Thomond’s 1615 Survey of Ibrickan, Co. Clare, **North Munster Antiquarian Journal**, v. 53, p. 173–191, 2013, p. 186–87.

was probably granted lands in reward for their services to the victorious Clann Taidhg.⁵⁶⁰ This practice would have been analogous to that of the Late Medieval galloglass, who provided regular service to Irish kings in exchange for land in which to settle.⁵⁶¹ Unfortunately, these two pieces of evidence are 300 years apart, and I have found no additional information on the family's activity to cast light on their exact terms of service.

Whichever motives brought the Comyns and Condons to Thomond, their presence on Clann Taidhg's roster of allies reveals that the Irish kings, just like English magnates, had access to high quality troops. When, fighting against de Clare in Dysert O'Dea, Feidhlim Ó Conchobhair spotted the army of his ally Muirchertach Ó Briain and thought they were English reinforcements, his confusion may have been due to more than the heat of battle alone.⁵⁶² As Katherine Simms noticed, the excerpt suggests that English and Irish armies were nearly indistinguishable in equipment and composition.⁵⁶³

Army strength

Victory in the battlefield seldom depended on training or equipment alone. As Prussian general Carl von Clausewitz once famously remarked, "so long as it is great enough to counterbalance all other contributing circumstances" – as indeed was the case in 13th and 14th century Ireland, when competing armies had similar quality and composition – "superiority of numbers admittedly is the most important factor in the outcome of an engagement".⁵⁶⁴ In this regard, how did the armies of English magnates and Irish kings compare?

English sources are fortunately generous with information on the strength of armies. A non-comprehensive sample of 13 paid forces between 1308 and 1358 compiled by Robin Frame points to an average of 915 men at full strength, ranging from 378 soldiers in 1329 to

560 MCINERNEY, *The Galloglass of Thomond*, p. 23.

561 *Ibid.*, p. 22.

562 "*adubairt Feidlimid go fíchguasach agá bfaicsin uada: truag sin, ar sé, is mó léigmidne in tiarmar begsluaig so na ngáidel tuille cabartha dáil ná d'ár naimdib. gided ó nach éidir dúinn dul ó'n dianimnid so do bríg nár chuibe ingabáil do dénam, díglam sinn féin go dingbála ar ár ndergnaimdib innus nach biadh lín catha díob d'ár néis fá chomair ár ndegcharat.*" O'GRADY (Org.), *Caithréim Thoirdealbhaigh*, p. 144.

563 SIMMS, *The Battle of Dysert O'Dea and the Gaelic Resurgence in Thomond*.

564 CLAUSEWITZ, Carl Von, *On War*, Princeton: Princeton University Press, 1989, p. 194–95.

2030 in 1345.⁵⁶⁵ A local magnate like Thomas de Clare would have fewer resources at his disposal than the Dublin government, which leads us to assume that his armies would seldom exceed this mark.

Surprisingly, these numbers are not altogether at odds with the figures given by Irish sources. The Irish Annals are generally unhelpful with its estimates for army strength. When their estimation of army strength is not absurd – such as the 20000 men assembled by Walter de Burgh in 1256⁵⁶⁶ – it is often given in “battles” (i.e. battalions) rather than men. The figures for casualties, on the other hand, are consistent throughout, generally numbering in the low hundreds (Table 3). They are also consistent with the figures for army strength and casualties given by the CT. (Table 4)

Annal entry	Casualties	Additional named casualties	Total
1256.4 ALC	76	12	88
1256.5 ALC	36		36
1261.5 ALC	15 knights 8 barons “many” <i>gillaidh</i> ⁵⁶⁷ “innumerable” mercenaries	2	25 +
1263.2 ALC	100		100
1266.17 ALC	31		31
1275.8 ALC	200 “ <i>cum multis aliis</i> ”		200+
1296.3 AI	500	1	501
1305.3 AC	140	2	142
1309 AClon	200 “or more”	10	210+
1316.3 AC	100 “ <i>et alii multi nobiles</i> ”	8	108+

565 FRAME, *Military Service in the Lordship of Ireland, 1290-1360: Institutions and Society on the Anglo-Gaelic Frontier*, p. 291.

566 “*is imchian roime sin ro tinóladh a comlinmhar int slúraig sin an Erinn, oir isedh ro h-airmedh annsin .i. fiche míle ar áiremh aoinfhir.*” ALC 1256.4. HENNESSY (Org.), *The Annals of Loch Cé. A Chronicle of Irish Affairs from A.D. 1014 to A.D. 1590.*, p. 408.

567 *Gilla* term that can be translated as “servant” or a “youth of an age to bear arms” (Cf. Gilla, in: **eDIL: An Electronic Dictionary of the Irish Language, based on the Contributions to a Dictionary of the Irish Language (Dublin: Royal Irish Academy, 1913-1976)**, [s.l.: s.n.], 2013. Available at: < <http://www.dil.ie/25843> > Access date: 02 Feb. 2022. Luke McInerney believes it had a military connotation of some sort. MCINERNEY, *The Galloglass of Thomond*, p. 30.

1317.8 AC	140 gallowglass “and many 5 others of that lineage”	145+
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Table 3: Some figures for casualties in military engagements in the Irish annals

Commanding faction	Number	Nature of force
Uí mBloid	200 (70 aristocrats) 568	Casualties (dead)
Clann Taidhg	800 ⁵⁶⁹	Full army
Clann Briain Ruaid	3000 ⁵⁷⁰	Full army
Clann Briain Ruaid and Mathgamhain Ó Briain	500 ⁵⁷¹	Full army
Clann Chúillen	120 ⁵⁷²	Vanguard
Clann Chúillen	1000 ⁵⁷³	Full army
Conchobhair mac an Togha ⁵⁷⁴	200 ⁵⁷⁵	Full army

568 “is iad do tuit ar taobláthair in tréncaththa i négmás madhmann na mórsluag sin .i. deichnebar agus trí fichit flathuasal do táisechaib cennadhairte na gcinedach, agus nír leth a náiremh dá nesbadaib ó sin amach [...] iná deich bfichit fer . áiremh a nég gá náiremh; atá ó'n ló sin ár láime.” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 42.

569 “agus is dóigh lium fós co fírinnech nach aidhle ná ocht céd a comáiremh re [a] bféchain na bfirmfocus, agus atáthisi trí míle do mórsochraide uasuil” *Ibid.*, p. 65.

570 See note above.

571 “agus do fágatar cúig céd catharmta cneséidighthi ina celgaib comnaidhe ar a cúlaim. agus rob iad so urraidhe na nuasalcelg sin.i. Dondcad agus degBrian dá mac Domnaill delbsolais i Briain, agus Mathghamain menmnachbeoda michear-céillidh cona macaib agus cona mórairechtaib.” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 79.

572 “sé fichit fer fallbuanbeoda fichrodcróda feidmchiuin-bregda findcuilénach” *Ibid.*, p. 82.

573 “bar na solascuilénaigh uile a nénéfcht. nír cuirsium acht ar cédchantain in comrád sin agus do dianinnsaighedar deich céd dá comall ina céimruatharaib.” *Ibid.*, p. 111. 1

574 This was probably the chief of a sub-lineage of the Uí Bhriain, although I was unable to find which one, or which kingdom it ruled.

575 “Is and sin do crom Concobar cráisechremar cloidhemhleathan dá cédferaim fá'n cath.i. mac tresgarbinnsaighthech in togha” O’GRADY (Org.), **Caithréim Thoirdhealbhaigh**, p. 111.

Clann Taidhg and allies	100 ⁵⁷⁶	Casualties (dead)
Clann Chúillen	230 ⁵⁷⁷	Casualties (wounded)
Clann Chúillen	250 ⁵⁷⁸	Casualties (dead)

Table 4: Some figures for casualties and army sizes in the CT

We can infer from this data that the army strength of Irish armies in the wars of 1276-1318 revolved around a few hundred soldiers, hardly ever exceeding 1000 combatants. This estimate matches a later record of payment for Irish sub-kings who served under the justiciar William of Windsor in 1375. According to the document, the Mic Conmara brought 400 men to the battlefield; The Uí Lochlainn of the Burren, 500; the Mic Mathgamhain of Corcabhaiscinn, 1000, the Uí Conchobhair of Corcamruad, 300.⁵⁷⁹ Katherine Simms gives lower estimates for the armies fielded during the Dysert O’Dea campaign in 1318, theorizing that Richard de Clare may have brought 600-800 soldiers to the field; Muirchertach Ó Briain, 500, and each of his vassals (Uí Dheághaidh, Uí h-Aichir and Uí Conchobhair) around 200 each.⁵⁸⁰ Still, she herself stresses these numbers “should probably be regarded as minimum ones”.⁵⁸¹

Evidently, a high degree of variation is to be expected. A king or magnate could not be expected to field in one year the exact number of soldiers brought to the battlefield in a previous campaign. Moreover, the rate of attrition that armies invariably suffered meant that their strength could fall considerably during the course of a single expedition, especially if it resulted in a protracted war season. The relatively high number of fallen chiefs and otherwise *uasal* individuals cited in the Uí mBlóid casualty list is noteworthy, but plausible. Uí mBlóid, after all, was a coalition of many petty kingdoms. It is likely that each of the *tuatha* was able

576 “fód inár négmais d’Eirinn Ní ticfaid ní táinic riam. do sluag gháidel ná ghailian; buan a bfaighbáil nár bfarra. slu ag d’anad mar d’anamar Do tuit d’ár gcathaib dá gclód. sul do fédsam a nimpód; ní détla forba dá bfuil. forgla céda d’ár bflathuib” *Ibid.*, p. 122. p. 122

577 “dá esbuidh do chloind Coilén Fiche deithnebar do’n droing. is trí deithnebar derbaim; dá céd sin is tricha tend. do dligh cricha gu coitcenn. mar rudhél do’n droing ar dath. do cloind Cuilén gu créchtach Maccon gu créchtach ní cé. tigherna clainne Cuilén” *Ibid.*, p. 123.

578 “Do gonad a timcell a triatha agus a tigherna.i. in tréinfer sin dá derbfine agus dá deghoirecht agus dá dílismuindtir.i. do cloind cródha cosgaraigh cosantaigh cliathachmir Cuilén, aonfiche dég agus deithnebar a ningnáis an fir ar fichit torcair isin tachar sin díb.” *Ibid.*, p. 131.

579 HARBISON, Sheelagh, William of Windsor and the Wars of Thomond, **The Journal of the Royal Society of Antiquaries of Ireland**, v. 119, p. 98–112, 1989, p. 106.P. 106

580 SIMMS, The Battle of Dysert O’Dea and the Gaelic Resurgence in Thomond, note 49.

581 *Ibid.*

to field a limited number of warriors, most of which would come from their personal household. On the other hand, powerful kings like the Uí Bhriain or the Mic Conmara of Clann Chúillen drew from their vassal's contingents as well as divisions of mercenaries and foreign allies. A coalitional army combining several armies of this proportion would easily number in the few thousands when fully assembled. This explains the relatively large contingent of 3000 men allegedly raised by Clann Brian Ruad and their allies.

The alliance system during wartime

To focus too much on the issue of tactics and terrain, however, is to miss the bigger picture. As Perellós and Froissart themselves make clear with their overstated comparisons to Bedouins and forest dwellers, Irish warfare was mobile in nature because the character of Irish patterns of settlement and domination so demanded. Irish subkings enjoyed a high degree of autonomy in relation to their overkings, and their compliance – as the practice of hostage taking attests – was obtained via extortionary measures. The forceful nature of these political bonds and the ubiquity with which they were violated led Simms to typify Gaelic Ireland as a society where the “fiction of voluntary adherence and mutual love and loyalty” engendered by feudalism was stripped of the ideological covers offered by “chivalric literature and legal jargon,” and obedience rested primordially on the threat of retaliation.⁵⁸² Writing specifically about pre-Invasion Ireland, N.B. Aitchison adopted a similar view, describing power in Irish society as “ultimately dependent on physical force”, “inherently unstable”, and “essentially transitory”.⁵⁸³ How this “power-politics”, as Ó Corráin once labelled them, were justified and promoted in Gaelic political discourse is complex enough a question to deserve a thesis of its own.⁵⁸⁴ In very practical terms, however, judgements such as these find a striking example in narrative descriptions of military mobilization. Alliances or nominal bonds of submission were not sure-fire assurances that a subking or external political actor would provide assistance in times of need. When a king's hold over his subjects was shaky, war could quickly turn into a scramble in which defenders and invaders would tour the country looking to either compel local chiefs to join their war or neutralize their opponents' allies before they could reach them.

582 SIMMS, *From Kings to Warlords*, p. 59,114.

583 AITCHISON, N. B., *KINGSHIP, SOCIETY, AND SACRALITY: RANK, POWER, AND IDEOLOGY IN EARLY MEDIEVAL IRELAND*, *Traditio*, v. 49, p. 45–75, 1994, p. 45.

584 MULHAIRE, *Kingship, lordship, and resistance*. is arguably that thesis.

We can observe this *modus operandi* in 1278, when Donnchad Ó Briain [11], aided by Thomas de Clare, successfully attempted to oust his rival Toirdhealbhach [9] from the kingship of Thomond. Rather than facing his rival's forces head-on, an approach that had resulted in a humiliating defeat in the Battle of Moygressan just a year before, Donnchad sent raiding parties against Thomond's subkingdoms, devastating their territories and "taking many tributes⁵⁸⁵ and important hostages".⁵⁸⁶ By the time Toirdhealbhach could take action, the subkingdoms of *trícha cét* Uí mBloid, Corcamruad, Boireann and Corcabhaiscinn had already been plundered and/or pacified.⁵⁸⁷ "When Toirdhealbhach [...] saw the whole country being flanked and surrounded by enemies", the CT tells us, "he abandoned Clonroad in haste and, to avoid a lopsided [confrontation], sought the protection of Clann Chúillen."⁵⁸⁸ The same *modus operandi* can be seen, albeit with less success, in the campaign that resulted in the death of Richard de Clare in 1318. The English lord chose Kilnasoolagh as an assembly point for his army, asking William de Burgh to gather his Irish allies – Mathgamhain Ó Briain and Cenél Dungháile – and meet him there.⁵⁸⁹ De Burgh, however, never showed up, forcing de Clare to change his plans. Rather than heading alone to Kilnasoolagh and from there attacking Clonroad directly, he marched northwards to Quin, from where he attacked Muirchertach Ó Briain [14]'s allies, the Uí Dheaghaigh, at their *longphoirt* in Cenél Fermaic.⁵⁹⁰ His plan may have been to quickly take out the Uí Dheaghaigh before they could join Muirchertach's main forces, just like Donnchad had

585 The word used is *máin*, meaning "gift", "benefit", "treasure" or "valuable possession" and appears on occasion as the translation for the Latin *munus*, *donum* or *beneficia*. In the Irish law tracts, it is sometimes employed with the specific meaning of "cattle". (see. eDil "main" dil.ie/31345). In this particular context, it is likely refers to cattle.

586 "*gur gabatar nert mór ar sliocht Fergusa isna tírib sin, agus do dtucatar mórán dá máinib agus dá mórbráidib leo*" O'GRADY (Org.), **Caithréim Thoirdhealbháigh**, p. 10. (Author's translation)

587 "*Sluaiged le Donnchad mac mBriain tar in Sináinn soir go sáraichbéil; go dtuc umla agus braigde leis ó bloidechaib, agus gur airg crích Uaithne ó a himlib go a hoireraib itir ech agus buar agus innmasaib, gur marb a dtárlla dá dáinib ris, agus go dtuc a dtáinte agus a dtromairgeda leis dá tig gusin gClárach. Is grod ina diaid sin go ndeachaid [Donnchad] mac Briain [ruaid] brígaigentach, agus Mathgamain O Briain cona mórso chraitib, tromsluag tairptech go crichaib buacárda Bóirne, agus as sin go Corcmoruaid*" *Ibid.*, p. 9–10.

588 *Othonnairc Toirdelbach mac Taidg i Briain a tír uile agá taoblot agus a naimde agá timchellugad do gach leith, tréiges chuain rámfada go deithbírech agus téid do sechnad a lethtruim ar chomairche clainne Chuiléin* p.10

589 "*Imthúsa in Chláraig: do chuir fesa agus techta go sir Uilliam óg a Búrc, dá rád ris Mathgamain O Briain agus cenél nDúngaile cona noirechtaib agus cona nimirgedaib do díon agus do tidlacad go coraidh cille suaichenta solasgainmige srebinfuairé sruthgairb mire Subalaig*" O'GRADY (Org.), **Caithréim Thoirdhealbháigh**, p. 140.

590 "*agus go rachad féin lín a sluaig agus a sochraide ina gcoinne agus ina gcomdail gonuige sin. agus gér b'é Mac Uilliam, do tinóil a tromsluag agus táinic leo in lá sin go hArd raithen; agus do gluaisedh isin ló chédna leisín gClárach go hisdad críchfairsing clármachairech caomsrothach cochallmaigrech caislén ghrednach clogbinnghlórach coitchinnlinmar celloiregda Cuinnche*" *Ibid.* p. 140

successfully attempted in 1278. Unfortunately for de Clare, the Uí Dheaghaigh were able to hold the line long enough for Muirchertach and the rest of his allies to converge at the battlefield and overwhelm the English army.⁵⁹¹

Being able to reach one's allies was only part of the problem. It was also necessary to convince them to help. The mechanisms for making and enforcing peace outlined above could ensure a king's support during an invasion, but the CT indicates that one's *oireacht* could turn against their own leader if it meant avoiding a war that went against their interests. The subkingdoms of Thomond had their own dynastic feuds, not unlike the dispute between Clann Tadhg and Clann Briain Ruaid among the Uí Bhriain, and these wars became entangled with the larger conflict for the overkingdom. Different claimants supported opposing factions of the Uí Bhriain, sometimes in the same battlefield. During the march that led to the Battle of Corcomroe Abbey in 1317, for instance, the Clann Tadhg forces "gave cattle to the *oireacht* of Uí hEchtigern that Diarmaid [Ó Briain of Clann Tadhg] was constantly watching through genuine co-fostorage [*comaltas*]" although "his *oireacht* was with the enemy in opposition."⁵⁹² In an earlier passage, the CT tells us that "warlike Cenél Fermaic" found itself "ravaging their own fair country and veritable native land on account of their enemies having it and holding it in opposition."⁵⁹³ The chieftom's royal lineage, the Uí Dheaghaigh, took their dispute to the battlefield not long afterwards, with Macraith Ó Deaghaigh "and his pick of well-bred, auspicious [...] fair nobles [*fionnuasail*] of Fermaic" supporting Clann Tadhg, and the rest of the lineage's battles listed as Clann Brian Rua's allies.⁵⁹⁴ In 1311, the king of Cenél Fermaic, Lochlainn Ó Deaghaigh, was attacked by Mathgamhain Ó Briain [8] in retaliation for not supporting de Clare and Clann Brian Ruad.⁵⁹⁵

591 "Dála Chonchobair chiallaigentaig i Degaid: ticit a lucht foraire le scélaib in Chláraig do beith ag innsaigid chuige; agus chuires techta go deinmnedach go Lochlainn O nAichir agus go Feidlimid fialchoscartach O gConchobair ag faisnéis turais in Chláraig dóib, agus agá iarraid orro techt go léirtinóilte gan anadh cona [n]oirechtaib i nagaid in Chláraig" *Ibid.*, p. 142.

592 "agus tucatar ellach a oirechta d'ua Echtigern do bí ag buanfheitheam Diarmada tré derbcomaltas agus in tairecht an fochair a nescarat ina naghaidh" *Ibid.*, p. 99.

593 "agus do bátar cenél bferchonta Fermaic ag folmugad a bfinntire firdúthcasa féin tré beith dá mborbnaimdib agá himchosnam ina nagaid." *Ibid.*, p. 56.

594 "Macraith delbsnuadach drehchorcra déidgléigél desráitech O Degaid agus gléire a [chinid] fhial-beoda foistinig fionnuasail fermacaig" ; "agus muinnter dianaignta Degaid ina gcathaib ciumaisneimnecha cianaignechna" *Ibid.*, p. 61.

595 "Do bátar tromairechta Tuadmuman re hed in fógmair ar in órdugad sin, gan uasal d'impód orra i gcoinne Diarmada ná in dubChláraig, nó go ndernadh comfu agra coinne itir Mathgamain mborbruathrach mbrígaigentach mbuantestach O mBriain agus Lochlainn rathmarbog rítoirbertach réimchonáich ruatharmer roscabradghorm riabach O nDegaid; agus do chóirigetar cuinnemh cille sruthguirme srebhuaine síthoilénaige sográdaige [na] subhalach. do gab mac i Briain ag brégrad Lochlainn go mórtuarastlach a hucht in Chláraig agus caomDiarmada, agus ní raib tarba isna tuarastlaib sin óir ní tréigfedh Lochlainn Muirchertach mac taobghasda Toirdelbaig ar innmus Tuadmuman cona táibimlib; agus do fágaib go hesaontadach in cuinne ar in 171

Lochlainn stood his ground, but was eventually captured in battle. Rather than resisting the invaders, his men immediately switched sides upon learning that their “tower of maintenance” (*tor congbála*) was taken captive.⁵⁹⁶

The case of the Mic Conmara of Clann Chúillen, whose politics the CT follows very closely, illustrates how fickle these alliances could be. In 1311, the *cenél* fell into a dispute between Domhnall Mac Conmara [3] and the sons of his brother (and former king) Cúmeda [2]. In an attempt to seize power to himself, Domhnall marched against the current *rí*, Donnchad mac Cúmeda [4], aided by the forces of Uí mBlóid, Cenél Dunghaile and Cenél Fermaic.⁵⁹⁷ In exchange for peace, the coalition put forth an outrageous list of demands, including the partition of Clann Chúillen between Domhnall and Donnchad. The latter refused the terms, had his chiefdom pillaged and was killed in combat.⁵⁹⁸ Witnessing the war between his vassals, the current king of Thomond, Donnchad Ó Briain [13] of Clann Tadhg, decided to intervene on the side of the remaining sons of Cúmeda, prompting Clann Brian Ruad to join the Domhnall Mac Conmara and his allies.⁵⁹⁹ What started as a dynastic dispute

*órdugad sin. Odchonnairc Mathgamain míchórugad muinntire Lochlainn ag lethanscáiled dá dtigib féin agus meirgeda donnchraobacha Diarmada í Briain cona bhloidechaib do leith a chúil chuige, mar do chóirigetar in celg acu um tosach; do léig Mathgamain mórmenmnach é féin cona mhuinntir tar in abainn siar go sotal-borb do lenmain Lochlainn go luathurmaisnech. do chuaid in toirechtas uile uatha do'n dul sin, agus ní dechaidh aonduine gidh nemnáthach ó impód laomscarcroideeh Lochloinn go hu rlam i ndáil éga do diantabairt chatha do na triathrígradaib tángatar dá ninnsaigid sin inad sin.” Ibid., p. 50–51. dates in the CT’s manuscript are dubious, but a fragmentary entry in the Annals of Inisfallen seems to confirm the episode happened in that year. Cf. AI 1311.15 MAC AIRT (Org.), **The Annals of Inisfallen**, p. 410.*

596 “*gur fhaom a ghabáil do na glantsluaigib arna iarraid dóib féin ar in rígmílid. do chreidetar cenél bFermaic do Diarmaid do'n dul sin ódchonnatar a dtor congbála ar a chumns” O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 52.*

597 “*Imthúsa triucha céd ua mBlóid: arna mborbscáiled agus ar dtollad a dtinóil, ar dtuitim a dtáisech agus ar mberrnad a mbrughad, ar gcrinad a gcathrach agus ar bhásugad a bfinnlerg, do gab truaige tromairechta Tuadmuman fá'n toice toirtimnedach táinic d'innsaigid na nuasal sin re hathgairit; agus dorigned snáth snadmchonailbech do shíol shaorBlóid toir agus tiar ar éntsligid acht a náirdri amáin. lucht miscaise agus míruin Mhic Chonmara do médaig a menmasan ag cloistecht in chomloinn sin chille Ghuaire. fa hiat so na sluaig do éirig do'n dula so d'iarraid chloinne Chuiléin do chumgugad .i. cenél bflathuasal bfiarrachta bFermaic, cenél ndonnmeirgech ndegchloidmech nDúngaile, agus Domnall mílla malachdub mórtóirbertach mac mic Con cona choméirge: do brig gur bfergach Domnall nach dó féin d'fognatar na hoirechta gan || uiresbaid. agus is iat so cumtha do chuiretar uatha do'n choméirge sin i gcenn Mic Conmara dá mhórtraochad .i. úi Flaithrí do Lochlainn O Dhegaid; cenél nDúngaile do shíor do tréigen; cert a dhúithche do chomroinn re Domnall mac mic Con .i. a dherbráthair féin do'n chur sin; agus éiric do tabairt d'uib Blóid ina mbrathdígbáil.” Ibid., p. 43.*

598 “*Nír ba des le Donnchad na dála sin; nír chomarléigetar clann Chuiléin dó a naontugad, agus ó nár faom a ndéanam do léigetar na sluaig remráite ar éntsligid for loscad agus for argain ua gCaisín. mar adchonnairc Donnchad in degruathar naimdide sin, do chuir tinól agus timsugad ar a dhegmuintir agus ar dtecht go haonláthair dóib d'innsaigetar go colgda céimdigainn a mbidbada, gur feradh cath naimdide nemchartanach agus gleo gáibtech gradinnsaigtech etorro, gur brisedh do degDonnchad agus gur marbadh urmór a oirecht agus a uasaltáisech” Ibid.*

599 “*Cidh tra acht ódchonnatar sluaig í shaorBriain agus sluaig Mic Uilliam ar éntsligid in tárbach fuaratar clann Chuiléin chathéchtaig .i. Mac Conmara do mharbad go míchomairlech agus cuid do maithib a mhuinntire*

within a single chieftaindom escalated into a regional war that involved both factions of the Uí Bhriain.

The situation was bound to become even more complicated. After failing to exploit the Mic Conmara war in their favour, Clann Briain Ruaid attempted to invade Thomond again, this time aided by Richard de Clare – whose participation may have been a response to the presence of the de Burgh in Clann Taidhg’s ranks. The English magnate executed the same *modus operandi* employed by Donnchad mac Brian Ruad [11] in 1278, despoiling the lands of Clann Taidhg’s vassals rather than attacking them head on. Surprisingly, Donnchad mac Conmara’s successor as king of Clann Chúillen, his brother Lochlainn, decided to join de Clare and Clann Briain Ruaid rather than sticking by Clann Taidhg, who had just helped him seize back power.⁶⁰⁰ The opportunity to take revenge against the local enemies who had attacked him – Cenél Fermaic and Cenél Dunghaile – spoke higher than his loyalty to the ruling king of Thomond.

In his analysis of revolts against the Uí Bhriain in the 11th and 12th centuries, Mulhaire highlighted the role of constant raiding and heavy taxation in pushing subjects towards rebellion.⁶⁰¹ The examples above seem to suggest that a similar dynamic was at work during the wars of 1276-1318. Attacks like these worked like an additional – and, perhaps, the ultimate – extortionary measure. If a provincial king could not bound a petty king to military assistance – or, at least, to staying put – an assurance could be obtained at spearpoint, raiding one’s land until they were forced to demobilize and accept conditions. Indeed, if there is any strategy that could reliably override a *cenél*’s commitment to a previous alliance, it seems to have involved undermining the economic resources without which a petty king would not be able to raise soldiers, keep one’s subjects content or even – if the worst came to pass – protect their own people from starvation. It was perhaps for this very reason that Muirchertach Ó Briain [14], as we have seen, gave cattle to the *oireacht* of the Uí hEchtigern during a campaign in which the loyalties of the lineage were divided. It is no coincidence, either, that the CT lauds the royal accomplishments of Toirdhealbhaich Ó Briain [9] by describing how he ruled

do mharbad mar in gcédna, do léigetar sruthruathar sirtachais tar slesaib na críche dá crechloscad, nó go dtarra ina nagaid do na hárdsluagaib sin” Ibid., p. 44.

⁶⁰⁰ *“Isin luan i ndiaid na himresna sin do chuaid in Clárach cona chathsluagaib, agus Diarmaid O Briain cona bhráithrib, agus dá chloinn Chuiléin cona gcinedachaib, gur loiscetar agus gur lomairgetar cenél bflaithimda bFermaic agus gur chrechatar is gur dianloiscetar mar in gcédna cenél nDúngaile; agus tángatar taoblán tar a nais dá dtír féin. do delaig deghMaccon agus cáimSida riu do’n ruathar sin, go rángatar go tuaiscert Echtge ara haimréide”. Ibid., p. 45.*

⁶⁰¹ MULHAIRE, **Kingship, lordship, and resistance**, p. 253–54.

for 24 years bright years without shortages for anyone, from lowborn to noble [*uasal*], without constraints for the poets, without lack of wine for the lords, without curtailment of the chiefs' herds, without loss of food or tender hogs for the hospitallers ⁶⁰², without poverty, without meagerness, without loss of wealth [*maínech*].⁶⁰³

But there was another side to devastation, to which the CT alludes when it claims that

a part of the *oireacht* [of Conchobhair na Siúdaine Ó Briain] [4]], because they had much wealth [*máine*] and prosperity, and had not been raided or plundered in a very long time, proceeded to disobey Conchobhair by not sending him the king's rent [*cíos*] or his entitled dues.⁶⁰⁴

It was the mark of a competent king to have thriving vassals, but not thriving to the point that their overlord's grace started feeling like a gilded cage. This sentiment is echoed by the obituaries of Irish kings in the annals, who described their late chiefs as both destroyers and healers (*Fer millti & lesaigti*)⁶⁰⁵, praising them for “protect[ing] and nourish[ing] their own province and friends” while at the same time lauding the ruthlessness with which they “banished and plundered their enemies in every place where they may be.”⁶⁰⁶ Katherine Simms suggested that this acquirement of submission via material concessions became only more prevalent in the Later Medieval Period, eventually supplanting hostage-taking as the most important victory condition in conflicts.⁶⁰⁷ Inspired by the actions of the English during the Hundred Years Wars, Anglo-Irish lords and Gaelic chiefs started exchanging captives for

602 In the Irish context, a *briugu* or hospitaller was a landowner with a public function to provide hospitality to others. Cf. *Briugu. In: eDIL: An Electronic Dictionary of the Irish Language, based on the Contributions to a Dictionary of the Irish Language (Dublin: Royal Irish Academy, 1913-1976)*, 2013. Available at: <<http://dil.ie/6874>> Access date: 02 Feb. 2022.

603 “*Acht atá ní cheana: do caithed in tromflaithes sin Toirdelbaig go tohachtach teresbadach tuathchonáich re ré cheitre finnblíadan bfíchet gan uiresbaid inmill ar aonduine ó ísel go huasal, gan chumgach ferannais ar fíledaib, gan trághad fína ar flaithib, gan bernadh tréda ar táisechaib, gan esbaid bídh ná bogthorc ar brugadaib, gan daidbhre gan deróile gan díth máinech.*” O’GRADY (Org.), *Caithréim Thoirdhealbhaigh*, p. 28. (Author’s translation)

604 “*cid tra acht tarra dá bithin sin do chuid dá degoirechtaib, tré méid a máine agus a mórmáithesa ar mbeith gan chreich gan chianargain re haimsir imchéin roime sin, dul i nanumla ar Chonchobar maille re gan a chíos rígha ná a dhualgas dligtech do chur chuig*” *Ibid.*, p. 4. (Author’s translation)

605 AC 1274.2 FREEMAN (Org.), *Annála Connacht: The Annals of Connacht.*, p. 160.

606 “*Fedlim h. Conchobair mac Mori Muman & Cathail Crobdeirgh. Conchobair ri Connacht, fer cosanta & cothaigti a cuicid fein & a carad for cech leth, fer indarbtha & airci a escarat cech inat imbitis.*” AC1265.7 p. 144. See also AC 1224.2 p. 2 AC 1293.2 p. 188; AC 1297.2 p. 196; AU 1305.1 p.412; AI 1302.2 p.392

607 SIMMS, *From Kings to Warlords*, p. 108.

ransom instead of keeping them in custody, an innovation that was symptomatic of a “a new kind of subjection, financial but not political”.⁶⁰⁸ The mentions of ransom payments in the pipe rolls of the exchequer reveal that this change was already beginning to take place during the wars of 1276-1318.⁶⁰⁹

In pursuing this equilibrium between largesse and plundering, the acts of Irish kings were not the only factors in the balance. Mulhaire remarked that two major rebellions against the Uí Bhriain in previous centuries – the Síl Muiredaig revolt of 1093 and the Laigin revolt of 1115 – happened during a period of severe economic and environmental upheavals. The Irish annals of the period mention the incidence of abnormally cold weather, freezing over of water courses, and widespread animal and human mortality.⁶¹⁰ It may well be, he argues, that these revolts were triggered by natural catastrophe or political opportunism; causes that are by no means mutually exclusive.⁶¹¹

Incidentally, as we have seen in Chapter 1,⁶¹² the years 1276-1318 were, too, a time of noteworthy climate change and distressing economic circumstances. Is it possible that these conditions affected the actions of Irish kings and English magnates in some way? To answer that question, we must turn to the structures of economic production and their relationship to the making of war.

3.5. Economy, Logistics, and the Handling of Extreme Events

Economy and logistics in Gaelic Thomond

The scholarship on the economy on medieval Ireland has generally emphasized differences between the mechanisms with which English magnates and Irish chiefs acquired and circulated wealth. Areas settled by the English were generally characterized by manpower-intensive cereal production, organization around nucleated settlements and widespread commercial activity focused on large cities such as Dublin, New Ross, Limerick

608 *Ibid.*, p. 109.

609 See, e.g. **The 37th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 51; **The 38th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 75; **The 39th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 26.

610 MULHAIRE, **Kingship, lordship, and resistance**, p. 253–54.

611 *Ibid.*, p. 254.P. 254

612 See 1.1. “The Great Northern European Disaster” above.

and Waterford. Irish chiefs of the second half of the 13th century, on the other hand, generally occupied less fertile and sparsely populated lands, practising a mixture of subsistence agriculture and pastoralism. Gaelic polities had few – if any – urbanized settlements, and sites of political and/or symbolical importance tended to be scattered across a territory rather than clustered in a manorial *caput*. Whereas trade was practiced to some extent, it did not approach English levels. The economic activities of secular Irish kings have been variedly called a “subsistence” or “barter” economy⁶¹³, characterized by “non-market transfer[s]”⁶¹⁴, “reciprocal acts,”⁶¹⁵ and “billeting and mobility.”⁶¹⁶

While this dichotomy is an obvious simplification, it is one that seems to be grounded in historical reality. Chris Chevallier’s maps of the distribution of wealth in early 14th century Ireland show a direct correlation between population density and the proximity to the land port towns under English control.⁶¹⁷ While commerce seems to have been a feature of Gaelic economy since the early medieval period, it would therefore be a mistake to assume that impersonal “market-type” transactions constituted the most ubiquitous means of circulating wealth and goods within this society. This role seemed to have been fallen to other types of exchange described by the Irish sources.

The Old Irish law tracts talk about three obligations a subject owed to his overlord, lest they became subject to distraint: *slogeid*, *cís* and *congbáil*.⁶¹⁸ The first was a responsibility to provide military service when requested; the second, the disposition to pay a regular tribute; the third, a duty to maintain persons at their own expense if so requested. In exchange, they received a ceremonial gift known as *rath*, often paid in cattle. These obligations were originally tied to the *quid pro quo* of clientship in Early Medieval Irish society, by means of which people put themselves under a bond of vassalage in exchange for a loan of cattle and protection to their herds.⁶¹⁹ By the post-Invasion period, however, these duties had expanded beyond their restrictions to become the basic mechanism for funding ever larger and more expensive wars. In this context, Katherine Simms explains, *congbáil* (“maintenance”) came to specifically mean the billeting of soldiers onto the population, and the very term *congbáil*

613 SIMMS, *From Kings to Warlords*, p. 146; SIMMS, Katherine, Guesting and Feasting in Gaelic Ireland, *The Journal of the Royal Society of Antiquaries of Ireland*, v. 108, p. 67–100, 1978, p. 67.

614 MCCORMICK, Exchange of Livestock in Early Christian Ireland, AD 150-1150, p. 35.

615 KERR, Thomas R; MCCORMICK, Finbar; O’SULLIVAN, Aidan, *The Economy of Early Medieval Ireland*, [s.l.]: Irish National Strategic Archaeological Research (INSTAR) programme 2013, 2013, p. 70–71.

616 CHEVALLIER, Chris, What was the distribution of wealth in Ireland c. 1300?, *History Ireland*, p. 18–21, 2019, p. 21.p. 21

617 *Ibid.*, p. 20.

618 SIMMS, *From Kings to Warlords*, p. 130.

619 SIMMS, Guesting and Feasting in Gaelic Ireland, p. 80.

was superseded by *coinnmheadh* (“guesting” or “billeting”) and *buannacht* (the quartering of *buanna*, i.e. “soldiers” or “mercenaries”), anglicized as “coyne” and “livery” respectively.⁶²⁰ Similarly, the gift of submission owed by an overlord came to be called not *rath* but *tuarastal* (“wages”), the same word used to describe the payment of mercenary soldiers.⁶²¹

Another source of income with its roots in clientship was the *cóe*, a winter feast held by the overlord which the clients were forced to provision.⁶²² By the post-Invasion period, however, *cóe* started to be called *cóisir* or *cuid-oidhche* (in English, “cosher” and “cuddy”), and ceased to be regarded as a seasonal exaction.⁶²³ The Mic Conmara rental, an early 14th century list of tributes owed to the Mic Conmara of Clann Chúillen, mentions only the duty to provide “free food once a year” (*biad sair sa bliagain*) – an obligation, moreover, which was at the time levied on territories, not vassals.⁶²⁴

Coyne, cosher and *tuarastal* were part of the same logic of exaction, whose existence and longevity can be explained by the constraints faced by the Irish in accumulating wealth. Because Irish chiefdoms lacked a centralized financial institution like the English exchequer, tributes were often collected in kind, billeting soldiers in the homes of their subjects and forcing them to cater to their every need. This *modus operandi* is described in a 1310 passage from the Annals of Loch Cé, where William “Liath” de Burgh [8] – an English magnate, but one whose family had been established in Ireland for generations and who was well-versed in Irish customs – quartered (*coinnmhedhis*) two hundred mercenaries on the Mic Uighíllin of Síol Muireghaigh, such that “there was no townland in [the chiefdom] without habitual *buannacht*, no *tuath* without exaction, no lord (*flaith*) without coercion”⁶²⁵

By the time of the wars of 1276-1318, there seems to be little practical difference, from a logistical standpoint, between the payment of professional soldiers and the reward owed by vassals or allies. The CT’s description of an army “assembled on *túarastal*” (i.e. retained on wages) in 1315 includes both members of the Irish aristocratic elite (*usal-*

620 SIMMS, *From Kings to Warlords*, p. 131.

621 *Ibid.*, p. 101.

622 SIMMS, *Guesting and Feasting in Gaelic Ireland*, p. 80.

623 *Ibid.*

624 The rentals associate the obligations with territories (*fearanaib*), quarters (*cceatrumnaib*) and places (*haite*). Eg. “*acus bia sair san bliagain a bfearanaib saora na haite sin*”; “*agus biad sair ra bliagain a cceatrumnaib saora na Tuata sin*”. Suim Tigernais Meic na Mara. HARDIMAN, James (Org.), *Ancient Irish Deeds and Writings*, Dublin: Graisberry, 1826, p. 43.

625 “[.] *coinnmhedhis da ced sersénach forra .i. Mac Uighilín cona rutta, & ni raibhe baile a Siol Muireghaigh uile gan gnath bhuanna, na tuath gan tabach, na flaith gan forrach [...]*” ALC 1310.1. HENNESSY (Org.), *The Annals of Loch Cé*, p. 552.

gháidel) and the English families Comyns and Condons (also known as de Canteton).⁶²⁶ The Comyns, in particular, are referred to as “friends” (*charat*), the same term used to describe the de Burgh, Clann Taidhg’s allies among the English magnates.⁶²⁷ The arrangements made for the maintenance of galloglass, mercenaries of Scottish descent who settled in Ireland from the mid-13th to the Early Modern period, serves as a point of comparison that illustrates the nature of the Irish billeting system.⁶²⁸ The *Suim Ciosa Uí Briain* (“O’Brien’s rental”), a 15th century list of dues owed to the kings of Thomond, indicates that some territories were required to provide maintenance (*bonna agus bairr*) to support galloglass and *gilladaibh*⁶²⁹ – a term that can be translated as “servant” or a “youth of an age to bear arms”⁶³⁰, and which McInerney believes had a military role of some sort.⁶³¹ Galloglass were not yet active in Thomond during the wars of 1276-1318, but the obligations enumerated in the rental closely match the exactions described in the annals relating to kerns in the period, and suggest a continuity in the retaining of both kinds of soldiers. The fact that the decision by the English government to disband the Uí Bhriain galloglass in 1576 was taken under the explicit intention to curb the customs of “coigny, kernetty and bonaght” reveals how intrinsically tied were the service of these warriors and the practice of coyne & livery. As McInerney rightly stated, the quartering of galloglass was not merely a means to have troops at one’s disposal, but “a key linchpin of the economic system that had sustained the semi-feudal nature of lordship”.⁶³² The same could be said of the billeting of kerns and Anglo-Irish mercenaries in the 13th and 14th centuries.

Efficient as coyne and livery may have been, it carried with it a grievous severe economic and human toll. The grim picture of entire villages taken over by soldiers found time and again in the Annals led Katherine Simms to compare this practice to the *dragonnades* of 17th century France: the quartering of undisciplined dragoons in the houses of peasants to

626 “do thinóil co tindesnach ar thuaras [t]laib tromsluagh allmarrach agus uasal-gháidhel. i. cland Briain mic Murcaid mic mórDonnchaid, agus na cundúnaigh cathairbreca, agus na cuimínigh cráisechremra.” O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 84.

627 “alMuircertach d’iarraidh a charat cumachtach do chosnam a tíre cona taobimlib .i. Uilliam binnglórach brethfoisdinech Búrc, agus Tomás Buitilér cona borbsluaghaib, agus na cuimínigh cona comérgi.” *Ibid.*, p. 78.

628 See Chapter 3.2. “The Making of War and the Making of Peace” for a discussion on the galloglass.

629 “So suim Cissa i Briain a Corcambrua, ar an taob amuig da Galloglacaib *bonna* agus *Bairr*, agus da *Gilladaibh*”; “So suim Ciosa i Briain a nGlae, ar an taob a muig da Galloglacaib, agus da *Gilladaibh*”. (pp.37-38) *Suim Ciosa Uí Briain* HARDIMAN (Org.), **Ancient Irish Deeds and Writings**, p. 37–38.

630 Gilla. Available at: < dil.ie/25843 > (Access Date 19/02/2022)

631 E.g. “So suim Cissa i Briain a Corcambrua, ar an taob amuig da Galloglacaib *bonna* agus *Bairr*, agus da *Gilladaibh*”; “So suim Ciosa i Briain a nGlae, ar an taob a muig da Galloglacaib, agus da *Gilladaibh*”. (pp.37-38).. MCINERNEY, *The Galloglass of Thomond*, p. 30.

632 *Ibid.*, p. 33.

intimidate and pacify the population.⁶³³ Whereas the *dragonnades* were explicitly meant as punitive raids, however, the coyne and livery practiced by medieval armies was a common, sometimes yearly affair, indispensable to the very operation of warfare.

Interestingly, the Annals suggest that soldiers had no qualms in collecting their wages from places protected by church sanctuary. This impression finds echo with testimonies from ecclesiastical authorities who complain about being extorted by the troops of secular lords. The *Míorbhuile Senáin* (“The Miracles of Senan”), a 14th century collection of contemporary miracles attributed to St. Senan, is rife with stories of this type of exactions taking place – generally, in the context of the stories, only to be promptly avenged by the saint.

As one episode tells us,

Once upon a time, Donnchad mac Domhnaill mac Briain Ruaidh took the headship of the lands of Corcabhaiscinn, and he set up his armies and billeted soldiers (*buannadha*) on the land. And so numerous were his kerns and his following that his soldiers would come upon three cows that were in the land, and that wasn’t enough. Donnchad Ua Briain himself outraged the churches of Senan, and took the cattle from them willingly or by force. [...] When the coarb of Senan heard this, he met the second coarb as well as the clergy in that land and place of Senan. And they brought the bells, altar bells, croziers and their other treasures and they proceeded to the place where Donnchad was and they said that unless he brought them every single thing he had taken, they would set God and Senan after him. [...] Donnchad sent for the soldiers to wreak destruction in another quarter. And then Donnchad was killed, and ten of his kinsmen who were with him in outraging Senan, and all of his soldiers as well.⁶³⁴

As a 1495 letter by the archbishop of Armagh vividly illustrates, church lands could find themselves preyed upon,

633 SIMMS, Guesting and Feasting in Gaelic Ireland, p. 83.

634 “*Feacht ann do gabh Donnchad mac Domhnaill mic Briain ruaidh cendus ar crích Chorca Baiscind, gur chuir a shlóigh & a buannadha istech foran tír, & ro báí d’iomat a cheithern & a dhamh coimhittehta, co roichedh búanda arna trí búaihb da raibhe ‘san tír, & nír dhiol doibh sin. Do chuaidh Donnchad Úa Briain fein do shárucchad cheall t-Senáin, & do thabairt a c-cruídh uatha d’áis no d’éiccen. [...] Ó ‘tcuala comharba Senáin sin, do thionóil an dara comharba chuícce maille lena raibhe do chléircibh annsa tír, & andsan m-baile sin t-Senáin. Ocus tuccattar a c-cluicc, & a c-ceolána & a m-bachla, & a n-uile mionna léo, & do chóttar bail i r-raibhe Donnchad, & adubhrattar, muna t-tuccadh sé doibh gach a rucc uatha, go c-cuirfittís Día & Senan ‘na diaigh air. [...] Ocus do chuir Dondchad fios arna búandadhaibh annsin chum aidhmille do denamh i n-aird oile. Ocus do marbadh Donnchad annsin, & an deichnebhar dá bhraitribh do bí maille ris ag sárucchad Senáin, & na búandadha uile.*” PLUMMER (Org.), *The Miracles of Senan*, p. 16–18. (Author’s translation).

[...] especially [with] those vile exactions commonly called coyne and livery, foyes and codhyes, demanding as it owed to them hospitality to themselves, their horses and servants; food for men and fodder for horses; meats, breads, beer and other things desired by them and which they considered pleasant without giving nothing in return.⁶³⁵

The mention of cosher (“codhyes”) alongside coyne bears special significance. In the Mic Conmara rental, the lands required to contribute food at the request of their overlord are often termed “free territories” (*bfearanaib saora*) or “free quarters” (*cceatrumnaib saora*).⁶³⁶ As Simms tentatively noticed, the implication is that cosher was a means to levy resources from lands which were otherwise exempt from taxation.⁶³⁷ Had this really been the case in 13th and 14th centuries, this would imply that the Uí Bhriain had effectively found a way to profit from the wealth of monasteries of Thomond and, possibly, to have access to a more diversified pool of resources than his mensal lands and secular vassals would have been able to provide.⁶³⁸

The CT frequently mention the billeting of soldiers in monasteries and suggests that these demands of hospitality could sometimes end violently. In an episode dated 1307, Síoda Mac Conmara [6]’s troops faced opposition of the locals of the “borough-town” of Kilsarnat (*sráide buirghéis Chille [...] Sarnátail*), provoking a conflict that culminated with the death of its constable. Síoda then proceeded to “Moynoe of pious fame”, where some of his people “went so far as to stay in the great church itself.”. The soldiers became angry with the monastery for not providing for their needs, and retaliated with brutality. Síoda’s foster-

635 “*et presertim illas detestabiles exacciones que vulgariter nominantur Coyn et lyberey Foyes et Codhyes alumpinacionesque et hospicium pro se suisque equis et familis quasi ex debito vendicantes alimenta que hominum et pabula equorum carnes panes cervisiam et alia quecumque ab eis desiderata et eis placabilia et delicata gratis.*” No. 5. Letters of Protection Given by the Archbishop of Armagh and His Suffragans to the Abbot and Convent of Mellifont (1495). COLUMCILLE, Fr. (Org.), Seven Documents from the Old Abbey of Mellifont, **Journal of the County Louth Archaeological Society**, v. 13, n. 1, p. 35–67, 1953, p. 56. (Author’s translation)

636 HARDIMAN (Org.), **Ancient Irish Deeds and Writings**, p. 43.

637 SIMMS, *Guesting and Feasting in Gaelic Ireland*, p. 80.

638 One of these resources would be fish. Fisheries and fishing rights are mentioned in the charters of monasteries founded by the Uí Bhriain in the 12th century. Cf. FLANAGAN, Marie Therese, **Irish Royal Charters: Texts and Contexts**, Oxford: Oxford University Press, 2005, p. 308, 320. There were also many fish weirs in the Shannon estuary in the period many of which, according to Aidan O’Sullivan, were probably in the hands of monasteries. O’SULLIVAN, Aidan, **Foragers, Farmers and Fishers in a Coastal Landscape: An Intertidal Archaeological Survey of the Shannon Estuary.**, Dublin: Royal Irish Academy, 2001, p. 180.

brother was slain in the ensuing struggle, which moved the Mic Conmara aristocrat to set all of the farm building on Moynoe's termon lands ablaze.⁶³⁹

It would be rash, of course, to assume that every attempt to exact coyne on monasteries involved such devastation. Séan Mac Craith writes about no such troubles when Muirchertach Ó Briain [14] and Maccon Mac Conmara [7] quartered their troops in the "fatuous church" of Tulach na nEspoc, near Mac Conmara's *ceann áit*.⁶⁴⁰ Similarly, during the march to Dysert O'Dea In 1318. Richard de Clare billeted his soldiers on St. Finian's church in Quin, a monastery and town under his control.⁶⁴¹

How much trust we can put in these passages depends on how much suspicion Mac Craith's blatant agenda elicits. Gaelic chiefs regarded coyne and livery as legitimate rights, and the practice was necessary to fund the very kind of relentless warfare the author praises throughout the CT. As a prose tract commissioned for a secular overlord, we should expect this work to gloss over the inconvenient – but possibly inevitable – fact that even the 'peaceful' quartering of soldiers represented a severe economic strain.

Nevertheless, restraining one's brutality might have been a political necessity. One can shear a sheep many times, but only skin it once, and no powerful Irish king would be willing to jeopardize the very resource pool that allowed him to amass power in the first place. The balance between greed and mercy formed what Katherine Simms has called a "protective equilibrium between supply and demand".⁶⁴² Kings were forced to exercise clemency due to the fact that their most ubiquitous means of exchange was livestock, a resource that makes it difficult – if not impossible – to accumulate surplus. Cattle and its by-products are perishable commodities, unsuitable for long-term hoarding. More importantly, the Gaelic Irish did not produce hay to provide for their cattle during wintertime, relying exclusively on grazing lands to keep their cows fed. Availability of land was constrained by geography and political reality

639 "agus ó nach fuaratar a bfritheolam go frichnamach, dorignetar drochabaise dá dhígail. do héighed umpu tréсна háirdghnimaib sin, agus do fregratar clann Mháilruanaid i Chormacáin na ruadhéigme sin; gur marbsat derbchomalta degShída do'n dianruathar sin, agus O Cinndeargáin fa sloinmed. Ar dtecht do na scélaib sin chum sciamShída, fásaid fiuchad firfeirge ann tré díth a dherbchomalta; go dtáinic Maccon agus caomShída, agus Aodh mac Donnchada mac a nderbráthar, ina gcéimruathar tinnesnach fó termann maighe heo d'aithle na haideda sin, agus tugatar aonlaom árdlasrach tar tuathaib agus tar trebhfoirgnemaib in termoinn uile i nénfecht i bfégmais a uasaltempuill; agus muna beith Maccon, ní coigeoltai eisen do'n dul sin. agus do lomairgset lethanchlár in termoinn fá thrédair gedaib, agus tángatar ar gcúla dá gcríchaib." O'GRADY (Org.), **Caithréim Thoirdealbhaigh**, p. 35. (Editor's translation)

640 "agus go tulaig árdoiregda uasalmírbuilig óirlegh minnaig aiffrendlógmair fosgadchlogbinn firchadasaig oirecht linmair fialchomarbaig erlamchoitchinn na nespoc. do anatar sin isdad uasal áirdchille sin in oidche sin." *Ibid.*, p. 138. A *ceann áit* (or "head place") was the chief residence of a clan.

641 "do an in oidche sin i náirdchill uasaláibinn aiffrendghnáthaig Fhingín" *Ibid.*, p. 140.

642 SIMMS, **From Kings to Warlords**, p. 146.

and could not be expanded at will. As a result, there was a hard ceiling to the number of cows a given king could keep, after which any accumulation would prove counterproductive.⁶⁴³ We have an example of such devaluation in a passage from the Annals of the Four Masters. In 1536, one king obtained so many cows after a profitable raid “that two beeves used to be given for a single bonn”.⁶⁴⁴

There were many ways in which a setback like this could be averted. The outright slaughter of surplus cattle was a simple, if crude, solution. This was apparently the course of action taken by Tadhg Ó Cellaigh and Ruaidhrí mac Cathal Ó Conchobhair in 1315, when, in a march against Ruaidhí’s rivals Feidhlim Ó Conchobhair and Maelruanaid Mac Diarmata,

They went both in pursuit of Feidhlim and Meic Diarmata and their *oireacht* that were near them as far as Leith Luigne and the slopes of Sliabh Gam and until Glenn Fathraim in particular, a place where they killed many thousand cows, sheep and horses, stripped noble [*uasli*] women, violated small children and small folk in that expedition⁶⁴⁵

As the annals themselves stress, the main shortcoming of destroying surplus cattle is that it made for little economic or political gain. Redistributing the animals among subjects and allies was an alternative, one that could also help solidify political bonds. A 12th century life of St. Maedoc of Ferns mentions that the kings of Breifne were obligated to give to the Church “a cow on a halter out of every raid”⁶⁴⁶, a practice which, according to Charles Doherty, “was almost certainly the practice all over the country.”⁶⁴⁷ Unfortunately, Doherty

643 MCCORMICK, Finbar, *The Decline of the Cow: Agricultural and Settlement Change in Early Medieval Ireland*, *Peritia*, v. 20, p. 210–25, 2008, p. 219.

644 “*Ro baóí d’aidhbhe creach & édala slóigh I Domhnaill go t-tabharthaóí dá mhart ar an m-bonn ina fhoslongport an tan-sin*” O’DONOVAN, John (Org.), *Annala Rioghachta Eireann: Annals of the kingdom of Ireland by the Four Masters*, Dublin: Hodges & Smith, 1848, p. 1432.

645 “*dochuardar diblinaib i llenmain Feidlim & Meic Diarmata & na n-oirecht bai ina fochair co LetirLugne & co slesaib Slebi Gam & co Glend Fathraim do sondrad,ait anar marbadar ilmili do buaib & cairuib & do chaiplib, & donochtadur mna uasli & do millset lenib beca & mindaine donturus-sin, & nir milled re cumne daine riam in ured-sin d’ellachar aenlathair cin tarba.*” AC 1315.12. FREEMAN (Org.), *Annála Connacht: the Annals of Connacht (A.D. 1224-1544)*, p. 239. (Author’s translation).

646 “*Ise so immorro luach baiste Aodha Finn do M’ Aodhóg ó Ibh Brúin .i. screpall as gach tigh do Mh’aodog gacha bliadna; each & earradh gach righ, & gach ban-rioghna; erradh & tlacht gacha taoisigh & gacha mná táoisigh, bó adhastair as gach creich o gach Breifneach o Druim Cliabh go Cenannus*”. Betha M’ Áedócc Ferna. PLUMMER, Charles (Org.), *Bethada Náem nÉrenn (Lives of Irish Saints)*, Oxford: Clarendon Press, 1922, p. 202.

647 DOHERTY, Charles, *Exchange and Trade in Early Medieval Ireland*, *The Journal of the Royal Society of Antiquaries of Ireland*, v. 110, p. 67–89, 1980, p. 75.

provided no evidence to substantiate this claim, and there is no direct evidence that a similar custom existed in Thomond a century and a half afterwards. Nevertheless, as mentioned in Chapter 2 above, the kings of Thomond offered copious patronage to churches, and it is likely that monasteries under their influence profited indirectly from their raids. The laudatory obituaries in the CT show that the Uí Bhriain and the Mic Conmara cherished the reputation of protectors of churches almost as much as that of ruthless marauders. Cumea Mac Conmara is described as the “the protector of our churches” who “exalted ecclesiastics” and “repaired holy churches repaired”.⁶⁴⁸ After the death of Donnchad Ó Briain [13], Mac Craith mourns that his passing left “many fair churches barren”⁶⁴⁹, and of his son Diarmuid he states that “he protected church and *tuath*” and that “for all churches he kept up a due [*cáin*]”.⁶⁵⁰ We are not told what this due entailed, but it is not a stretch to assume it might have included a share of the spoils – or, at the very least, that it might have been paid in livestock in some measure. The word *cáin* appears with this exact meaning in another passage of the CT, when we are told that the assembled elite of Clann Chúillen “found de Clare’s *cáin* and the kerns that drove it [...]. They killed the kerns and took the tribute back into the borders of Echtge.”⁶⁵¹

The use of the Irish word *cáin* to denote a cattle tribute pledged to the lord of Thomond indicates that the English and Irish economic systems, different as their foundations and goals might have been, were closely intertwined. To understand how these exchanges might have shaped the political relationships between these elites, we must analyse their role from the point of view of the English.

Economy and Logistics in English Thomond

The Manorial Economy

648 “Cú meda ar míne in mórghrian Cúmeda comairce ár gcell”, “do uaisligedh a egalsa, do niamchóirigedh a náimthempuill” O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 33. (Author’s translation).

649 “Bud imda finnhell go fás”. *Ibid.*, p. 48. (Author’s translation).

650 “Do choimédaig cell is tuath”; “Do chongbadh do gach cill cáin.” *Ibid.*, p. 59.

651 “agus do fuaratar cáin in Chláraig agá tidlacad agus ceitheirne ina diaid agá dlúithtimáin. do marbatar in ceitheirn agus rucatar in cáin ar gcúla i gcrích Echtge do’n ruaig sin”. *Ibid.*, p. 14. (Author’s translation).

In Ireland, as in England, the basic unit of seigneurial administration was the manor. These were estates organized around a central settlement (often referred to as a *caput*) that generally consisted of a castle or fortified residence, court and surrounding town. As centres of production, manors were primarily agrarian in nature, and around 70% of land within their confines was kept under arable conditions.⁶⁵² Part of their output came from the lord's own demesne, but most came from the dues of tenants, who held land in exchange for rent and/or military service.⁶⁵³ Lords also collected a perquisite from tolls, fairs, local courts and any other productive facilities – such as mills, ponds and orchards within their domains.

While the broad strokes of manorial administration can be seen across the Lordship of Ireland, local realities had an important effect on how they exploited their sources of revenue. According to Mary C. Lyons, manors in the “land of peace” – i.e. areas that had been more heavily settled and were not threatened as often by Irish attacks – were characterized by large demesne estates and geared towards large-scale production of surplus for the grain market.⁶⁵⁴ In the late 13th century, these estates were instrumental in providing victuals for king Edward I's military expeditions in Wales, France and Scotland – often, at cost. This practice, known as purveyance, became increasingly onerous as the century progressed.⁶⁵⁵ The profitability of these estates before the 1290s was such that led Margaret Murphy to credit the English with, if not with the introduction of large-scale cereal production, a least the implementation of “a commercial mind-set to agriculture” in Ireland.⁶⁵⁶

Manors located on the frontier – where Irish raids were more common and social stratification less accentuated – tended to have a different economic profile. According to Lyons, the military challenges faced by lords in these regions meant they had less time and resources to consider how to profitably exploit their estates. As such, demesnes tended to be smaller and the number of free tenants larger. Income “would have been derived mainly, if not exclusively, from rent”.⁶⁵⁷ Parts of their lordship would have not been manorialized at all, but left instead in the hands of local Irish chiefs in exchange for a yearly stipend. As Keith

652 MURPHY, *The Economy*, p. 391.

653 *Ibid.*, p. 397.

654 LYONS, **Manorial administration and the manorial economy of Ireland c. 1200-1377**, p. 189.

655 *Ibid.*, p. 330.

656 MURPHY, *The Economy*, p. 390.

657 LYONS, **Manorial administration and the manorial economy of Ireland c. 1200-1377**, p. 189.

Waters remarks, forcing the Irish to pay rent in this fashion was as close to a “conquest” as the English were capable of undertaking in the far fringes of the Lordship.⁶⁵⁸

The major available source for the extent and valuation of de Clares’ estate is Thomas de Clare’s inquisition post-mortem, an account of the magnate’s estates made after his death in 1287 (Table 5).⁶⁵⁹

Manor	Type of income	Sum
Inchiquin		
	Demesne	£19 12s 6d
	<i>Betagii</i> 660	£36 2s
	Free Tenants	£17 5s 2d
	Royal service	£5 4s
	Burgesses	£42 14s
	Mills, turbary, etc.	77s 4d
	Hundred, courts and fairs	£4 7s
	Total	£123 19s
Any		
	Demesne	£17 10s
	Free tenants	£3 5s 9d
	Burgesses	£6 7s 3d
	Service	£4 17s 4 ½
	Assets etc	£1 16s
	Perquisites, tolls, etc	£6 13s 2 ½
	Total:	£36 11s 6d
Moyavenach		
	Demesne	£6 2s 1d
	<i>Betagii</i> and <i>gabelarii</i>	£2 6s 8d
	Free tenants	£1 19s 5d
	Perquisites etc	12s
	Total	£15 2d
Baluduwyl		
	Demesne	£2 16s 4d
	Rent and work of <i>betagii</i>	12s 3d
	Total	£3 8s 7d

658 WATERS, Keith, *The Earls of Desmond in the Fourteenth Century*, Doctoral Thesis, Durham University, Durham, 2004, p. 162.

659 SWEETMAN (Org.), *Calendar of Documents Relating to Ireland, 1285-1292*, p. 202 No. 459.

660 *Betagii* (from the Irish *biattach*) were serfs of Irish origin, often descendants of the original occupants of Gaelic lands prior to the English occupation.

Reyns		
	Demesne	£5 1s 6d
	Free tenants	£1 1s 1d
	Perquisites	2s
	Total:	£6 4s 7d
Leynach		
	Demesne	£2 10s
	Free tenant	1 silver penny
	Total:	£4 10s 1d
Bunratty		
	Demesne	£5 6s 2d
	Free tenants	£42 4s 8d
	O'Brien rent	£121 11s
	Assets and perquisites	£2 2s 8d
	Total	£171 4s 6d
	Grand total	£356 1s 4d

Table 5: The manors of Thomas de Clare (d.1287) according to his inquisition post-mortem

As expected from a manor located in the frontier, the reported income rendered by free tenants vastly exceed the revenue of his demesne lands. Bunratty alone accounted for nearly half of the total valuation of de Clare's estates, although most of its expected earnings were due to the rents owed by the Uí Bhriain – who, despite posturing as kings in a pre-Invasion fashion, were officially tenants of de Clare in the eyes of the English Crown. As it was customary with inquisitions post-mortem, these numbers were probably underestimated.⁶⁶¹ Michael Altschul estimated that de Clare's actual income could have been as high as £1000, of which *circa* £950 came from Thomond and his other Irish holdings.⁶⁶² The pipe rolls give us notably larger numbers, but reiterate the relative importance of the Uí Bhriain's contribution. Two parts of Bunratty manor alone rendered £406 11s 2 ¾ d in 1298-99, of which £249 15s 8d came from the rent of the Irish kings.⁶⁶³ Given the cashless nature

661 For a discussion on the reliability of inquisitions post-mortem, Cf. HARTLAND, Beth, **English rule in Ireland, c.1272-c.1315: aspects of royal and aristocratic lordship.**, Doctoral Thesis, Durham University, 2001, p. 248.

662 ALTSCHUL, **A Baronial Family in Medieval England**, p. 194.

663 **The 38th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 39.

of the Irish economy, these tributes were likely paid in livestock. The pipe rolls recorded several examples of Irish chiefs offering reparations in cattle, but these payments should not be seen as representative, as they do not include the value of unsold cattle.⁶⁶⁴ One of the few instances in which we know they were in fact sold can be found in the roll for 9 Edward I (Nov. 1280 – Nov 1281), which informs us of a sum of £112 6s 8d obtained from the sale of 340 cows from the “prey of Thomond”.⁶⁶⁵ The booty in question was arguably brought in by the lord of Ormond Theobald Butler, who invaded Thomond after an Irish attack on Bunratty in the same year.⁶⁶⁶ The CT hints that the de Clare may have similarly received cattle payment from the Irish. As mentioned above, one of the occurrences of the word *cáin* (“tribute”) in the text denotes a cattle herd being driven by kerns towards Bunratty.⁶⁶⁷ While cows did not play the same role in English economy as they did in the Gaelic chiefdoms, they were an important source provisions for armies and hides for merchants. Timothy O’Neill remarks that hides became one of the most profitable Irish exports in the period.⁶⁶⁸ In his assessment, the centrality of Gaelic Ireland to the English hide trade was such that the industry “was largely dependent on extensive interchanges between the merchants of the towns and the native Irish.”⁶⁶⁹

As this brief outline of the English manorial system reveals, billeting and raiding were – in theory at least – much less central to the economy of English lordships than they were to Irish chiefdoms. It is crucial, therefore, to assess how the de Clares channelled their resources into measures to defend their manors and ensure the obedience of his Irish allies. And, even more important, to determine if the means at their disposal were up to the task at hand.

Military service and the funding of expeditions

664 Cf. e.g. **The 36th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 74; **The 37th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 27.

665 **The 36th Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 53.

666 Cf. ORPEN, **Ireland Under the Normans, Vol.4**, p. 72–73.

667 “*agus do fuaratar cáin in Chláraig agá tidlacad agus ceitheirne ina diaid agá dluithtimáin. do marbatar in ceitheirn agus rucatar in cáin ar gcúla i gcrích Echtge do’n ruaig sin*” O’GRADY (Org.), **Caithréim Thoirdealbhaigh**, p. 14.

668 O’NEILL, Timothy, **Merchants and Mariners in Medieval Ireland**, Dublin: Irish Academic Press, 1987, p. 77.

669 *Ibid.*, p. 82–83.

In theory, at least, every able-bodied subject of the English Crown was required to serve in the defense of the Lordship. The Statutes of Winchester, proclaimed in England in 1285 and ratified in Ireland in 1308, stipulate that “every man between the ages of fifteen and sixty shall be assessed and sworn to arms according to the quality of his lands and goods”.⁶⁷⁰ The acts of the Dublin parliament of 1297 similarly assert that every tenant holding 20 *librates* of land should keep a caparisoned horse (*equum coopertum*) and appropriate arms at the ready.⁶⁷¹ The rest of the tenants should keep a hobby (*hobino*) “and other unarmored horses according to their means”.⁶⁷² “Frequently” the acts tells us “it happens that felons escape with their loot [...] because the people of the country do not have horses at the ready with which to pursue them”.⁶⁷³ To magnates like the lords of Thomond, concerns like these would have resonated with striking urgency. In a land constantly subject to small-scale tribute warfare, such as the Irish frontier, the capacity to quickly and reliably raise an army was a top priority for tenants in chief of the Crown.⁶⁷⁴ Lordship in these regions, R.R. Davies observed, “was military lordship or it was no lordship at all.”⁶⁷⁵

In addition to general defense duty, those who held land of the Crown – be it directly, like the magnates, be it indirectly, via sub-infeudation – were often required to heed military summons in a duty known as knight’s service. One of the ways to fulfil this obligation was to provide men or personally serve in the armies assembled by the Crown – an opportunity that appealed to many within the aristocratic elite, as military service was a quick way to earn the king’s favour.⁶⁷⁶ In time, however, these summonses were increasingly commuted to a war tax known as scutage or royal service. The money obtained from this levy would be used to buy victuals, provision castles and/or hire mercenaries to bolster the ranks. This sum could be

670 “Commaunde est [...] qe chescun home entre quinze annz e seisaunte soit asis e jure as armes, solum la quantite de lur terres et de lur chaicus.” Statute of Winchester, 1285. **Statutes of the Realm**, [s.l.: s.n., s.d.], p. 96. (Author’s translation. Underlined letters are my own transcription.)

671 “Quam propter concordatus est et concessus, quod quilibus tenens xx libratas terre siue in marchia siue in terra pacis cuiuscumque fuert condicionis habeat vnum Equum competenter coopertus, una cum ceteris armis quod ad hoc pertinet continue promptum in sua mansione.” Acts of the Parliament at Dublin, 1297. BERRY, Henry F. (Org.), **Statutes and Ordinances and Acts of the Parliament of Ireland, vol 1: King John to Henry V**, Dublin: HMSO, 1097, p. 201. (Underlined letters are my own transcription.)

672 “Alii autem tenentes habeant hobinos et alios Equos discoopertus iuxta suas facultates.” Acts of the Parliament at Dublin, 1297. *Ibid.*, p. 201. (Author’s translation. Underlined letters are my own transcription.)

673 “Frequenter eciã accidit quod felones evadunt cum predis suis aliquando captis in terra pacis per eo quod compatriote non habent equos ad arma ad insequandem eos sicut expediret.” Acts of the Parliament at Dublin, 1297. *Ibid.* (Author’s translation. Underlined letters are my own transcription.)

674 DAVIES, **Lords and Lordship in the British Isles in the Late Middle Ages Hardcover**, p. 120.

675 *Ibid.*, p. 99.

676 *Ibid.*, p. 118; HARTLAND, **English rule in Ireland, c.1272-c.1315**, p. 5.

spent by the justiciar⁶⁷⁷ himself or granted to another magnate to further the king's interests. In 1278, for example, Thomas de Clare himself was promised the knight's services of Ireland to aid in the conquest of Thomond if he first managed to lead the king's army against Irish enemies in Leinster.⁶⁷⁸ The campaign was a defeat, although de Clare eventually managed to get some financial support from the exchequer.⁶⁷⁹

The value of one knight's service in the 13th century was 40s (or £2)⁶⁸⁰, and different tenants owed different numbers of knight services depending on the size and value of the lands they held. In the case of Thomas de Clare, the grant of the liberty of Thomond came with the obligation to provide the service of 10 knights – in practice, a contribution of £20 every time royal service was summoned.⁶⁸¹ Otway-Ruthven estimated that, by the end of the thirteenth century, the Lordship of Ireland as a whole was able to raise the service of 425 knights (or £850) every time scutage was proclaimed.⁶⁸² In practice, this sum was likely higher, as tenants in chief subinfeudated their estates into more fees than were necessary to meet their quotas. This allowed magnates to profit from each proclamation of royal service, cashing in from the surplus contributions owed by their tenants.⁶⁸³ Thomas de Clare was authorized to enfeoff knights in Thomond on July 26, 1276, and his inquisition post-mortem lists tenants holding a total of 22,5 knights fees (i.e. extent of land needed to maintain one knight) and rendering £13 19s via service.⁶⁸⁴

The service of tenants – either in person or payment— and the general obligations to defend one's land were a principal source of manpower and provisions for magnates. The way in which these resources were employed depended on the nature and frequency of warfare. Rees Davies argued that military households – cadres of warriors permanently mobilized to defend the lord and his interests – had ceased to exist in England, as the making of war became “a royal monopoly”.⁶⁸⁵ In the dangerous conditions of the Irish frontier, however, power hinged, as Simms remarked, on “the hands of a sparsely scattered military elite” and a “string of garrisoned castles”, without which “control of such regions could be

677 The chief governor of the English Crown in Ireland.

678 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1252-1284**, p. 280 No. 1476.

679 CONNOLLY (Org.), **Irish Exchequer Payments 1270-1446**, p. 29, 41.

680 OTWAY-RUTHVEN, Jocelyn, Knight Service in Ireland, **The Journal of the Royal Society of Antiquaries of Ireland**, v. 89, n. 1, p. 1–15, 1959, p. 5.

681 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1252-1284**, p. 217 No. 1194.

682 OTWAY-RUTHVEN, Knight Service in Ireland, p. 5.

683 *Ibid.*, p. 6.

684 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1252-1284**, p. 229 No. 1261;

SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1285-1292**, p. 202 No. 459.

685 P. 120

shattered overnight”.⁶⁸⁶ It is not surprising, therefore, to find a large garrison stationed at Bunratty castle. In 1318, year of the death of Richard de Clare at the Battle of Dysert O’Dea, the fortress boasted a garrison of 5 men-at-arms with *equi cooperti*, 12 *hobelarii* (light mounted infantrymen) and 78 foot soldiers. According to the pipe rolls, retaining this small army costed £35 12s 6d for 38 days of service, at a daily wage of 1s. per man-at-arm, 4d. per *hobelarius* and 1½d. per footman.⁶⁸⁷ These numbers may seem small compared to the large armies of the Continent, but they must be seen in the light of local conditions. English armies in Ireland rarely exceeded 1000 soldiers.⁶⁸⁸ In a conservative estimate for the campaign of Dysert O’Dea, Simms theorized Richard de Clare may have brought 600-800 soldiers to the field; Muirchertach Ó Briain, 500, and each of his vassals (Uí Dheághaidh, Uí h-Aichir and Uí Conchobhair) around 200 each.⁶⁸⁹ In this context, a contingent of 95 mobilized soldiers under de Clare’s direct command was far from a negligible force.

The defense of de Clare’s lordship, however, hinged on more than garrison duty. A passage in the Annals of Friar John Clyn provides a glimpse into the composition of forces the lords of Thomond could summon for their expeditions. The entry lists the names of four knights who perished alongside Richard in 1318.⁶⁹⁰ Although Dysert O’Dea is not mentioned by name, the date makes it clear that they perished in the battle. They are Thomas de Lesse, Henry de Capella, James and Johann de Canteton. The latter, as we have seen, were member of a family already active in Thomond in 1315, albeit fighting for Clann Tadhg Ó Briain, de Clare’s Irish enemies. Simms believes the de Cantetons were aiding the Irish in the capacity of mercenaries, which would explain the *volte-face*.⁶⁹¹ However, it is worthy pointing out that the de Burgh, another of Clann Tadhg’s allies in 1315, also switched sides and supported de Clare in 1318. It is possible that, in both cases, the de Cantetons were fighting as allies of the de Burgh rather than under direct orders of either Clann Tadhg or de Clare.

De Lesse and de Capella, on the other hand, had much closer bonds with the lords of Thomond. These men belonged to families who held land of de Clare, although not

686 SIMMS, *The Battle of Dysert O’Dea and the Gaelic Resurgence in Thomond*.

687 **The 42nd Report of the Deputy Keeper of the Public Records and Keeper of the State Papers in Ireland**, p. 21.

688 FRAME, *Military Service in the Lordship of Ireland, 1290-1360: Institutions and Society on the Anglo-Gaelic Frontier*, p. 291.

689 SIMMS, *The Battle of Dysert O’Dea and the Gaelic Resurgence in Thomond, The O’Briens and the Anglo-Norman Conquest*, para 7.

690 *Idus Maii, occiditur dominus Ricardus de Clare per suos Hibernicos de Totmonia cum aliis 4 militibus, domino Thoma de Lesse, domino Henrico de Capella, dominis Jacobo et Johanne de Canteton, et aliis multis, die Jove in mane.* (1318.6)

691 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1285-1292**, p. 203 No. 459.

specifically in the manor of Bunratty. In 1287, one Philip de Capella held 3 knight's fees in Kille, manor of Inchiquin.⁶⁹² Two other men of the same last name, Henry and David, held lands in Monge and Gerbaly, and Athmolk, respectively, both in the manor of Moyavenach. Maurice de Lee held land in Cromman, also in Moyavenach. The fact that these men were present at Dysert O Dea show that, despite the relatively small extent of his lands in Thomond, de Clare could mobilize forces from all of his estates in the defence of Bunratty.

The lords of Thomond and their tenants were also associated, by blood or marriage, to important members of the Anglo-Irish aristocratic elite. These connections could be also relied upon if the de Clares needed to field a significant army to overpower their enemies. Thomas de Clare was married to Juliana, daughter of Maurice fitz Maurice (d.1286), member of a line of descendants of Maurice fitz Gerald (d.1176), 1st baron of Naas, known in this period as the Geraldines of Offaly.⁶⁹³ The CT suggests the Geraldines helped de Clare in the first years of his lordship, mentioning the family as one of the parties accompanying de Clare in an expedition in 1277.⁶⁹⁴ Later, the text lists Patrick fitz Maurice, "son and heir of the fitz Maurice of Kerry, and who was the brother of de Clare's wife" as a casualty in the Battle of Moygressan in the same year, in which de Clare and his ally Brian Ruad Ó Briain were defeated.⁶⁹⁵ The credibility of this passage is questionable, as the Geraldines of Kerry and the Geraldines of Offaly were different branches of the family, and de Clare's wife Juliana belonged to the latter. It is possible the author of the CT took Juliana's brother as a member of the Kerry branch by mistake, or, alternatively, that Juliana's brother (of whom little is known) did not fight in Thomond at all. Be that as it may, the CT also informs us that their father, Maurice Fitz Maurice, was at the castle after the onslaught and approved of de Clare's decision to brutally murder Brian Ruad in a fit of rage.⁶⁹⁶ If de Clare's father-in-law was indeed present in his capital, it is likely he came with an army which would have taken place in the battle.

692 *Ibid.*, p. 206 No. 459.

693 HARTLAND, English Lords in Late Thirteenth and Early Fourteenth Century Ireland: Roger Bigod and the de Clare lords of Thomond, p. 341.

694 "*Dála in Chláraig: chuires tinól ós isel go deithbirech ar gallaib Muman as gach áird ina rabatar [...] tángatar ann clann Gherailt chaithechtach agus gasrad ghuaisbertach in Buitiléir*" O'GRADY (Org.), **Caithréim Thoirdealbhaigh**, p. 6.

695 *agus gur marbad imad dá míledaib. go háirithe tucad tromár doáirme ar glasghallaib in Chláraig, innus gur tuitetar fórgla a dtérfar im Pátraic Mág Muiris .i. mac agus oigre Még Muiris chiarraide, agus ba derbráthair do mnái in Chláraig in degdamna sin Ibid.*, p. 8. (Author's translation).

696 "*gur órdaig go brostaigtech drochcomairlech Brian do riagad nó do chrochad mar sásad dá mnái agus do Mág Muiris do bí isin tig in tráth sin*". *Ibid.*, p. 9.

It would make sense to assume that the Geraldines of Offaly would be keen to provide military support to de Clare, not in the least because his wars with the Uí Bhriain put him at odds with Clann Taidhg's English allies, the de Burgh earls of Ulster, with whom the Geraldines held a longstanding – and often violent – rivalry. Keith Waters, however, argues that the Geraldines of Offaly took little part in the conflicts in Thomond after 1277, even though members of the family held lands of de Clare in the manor of Bunratty.⁶⁹⁷ The same is not true of a different line of the family, the Geraldines of Desmond, descendants of Maurice fitz Gerald who split from the Offaly line in the early 13th century.⁶⁹⁸ Waters argued that Richard de Clare, Thomas' son, was married to Joan, a sister of Maurice fitz Thomas (d. 1356) of the Desmond line.⁶⁹⁹ In 1280, according to the CT, the English and Irish convened to discuss a partition of Thomond between Clann Taidhg and Clann Briain Ruaid. De Clare attended accompanied by Fitz Gerald (*Mac Gerailt*) and “an army of the English and Irish of the province of Munster”.⁷⁰⁰ The specific mention that their forces came from Munster strongly suggest that the “Fitz Gerald” in question may have been a member of the Geraldines of Desmond rather than Offaly. The Annals of Inisfallen provide further evidence of the collaboration with this branch of the family, mentioning Maurice fitz Thomas, de Clare, and de Clare's tenant Maurice de Rocheford fighting together against Muirchertach Ó Briain of Clann Tadhg in 1314.⁷⁰¹ The interest of these men in the liberty of Thomond can be seen in their actions after Richard's death. Fitz Thomas led a retaliatory expedition against Clann Tadhg following the Battle of Dysert O Dea, and he and de Rocheford were granted custody of de Clare's lands after the death of Richard – and, later, that of his son Thomas.⁷⁰²

697 WATERS, **The Earls of Desmond in the Fourteenth Century**, p. 27. Thomas de Clare's inquisition post-mortem lists "the heirs of Gerald son of Maurice" as free tenants holding a vill rendering 4 marks a year in Rathlathyn. SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1285-1292**, p. 207, no. 459.

698 WATERS, **The Earls of Desmond in the Fourteenth Century**, p. 256.

699 *Ibid.*, p. 28.

700 “*agus Mac Gerailt agus in gallChlárach co ngasradaib gall agus gáidel dá cúigedh Muman ina mórtimcell do toighecht i ndeiscert in tíre dá tuathrodrébadh*” O'GRADY (Org.), **Caithréim Thoirdhealbháigh**, p. 17 (Author's translation).

701 “*Et statim post vnam quindenam congregatis sibi hominibus domini Ricardi de Clar et adiutorio Mc. Tomais sed [&] fratre suo & domino Mauricio de Rupe Forti intrauerunt Bun Rati.*” 1314.3. MAC AIRT (Org.), **The Annals of Inisfallen**, p. 416.

702 “*Vi. idus Maii occiditur dominus Ricardus de Clar cum quatuor militibus & multis aliis per Mauricium O Briain in Totomonia. Et in auptumpno sequenti expedicio magna congregatur in Totomonia per dominum Mauricium filium Thomae & Dermicium Ma Charthig & Brian filium Donaldi I Briain & per Matheum O Briain filium Donaldi Connactyg, vbi occiditur filius eiusdem Mathei, qui prius fuit subdiaconus in ordine Fratrum Minorum & postea a(postata) era(t)*” 1318.3. *Ibid.*, p. 428. WATERS, **The Earls of Desmond in the Fourteenth Century**, p. 36–37.

Alliances like these were often enforced by more than goodwill alone. Magnates sometimes sought to procure additional military service by entering agreements of non-tenurial nature. The terms of a number of such pledges survive in documents known as indentures of retainer, contracts which grew in importance within the English elite as the availability of land as a reward for service decreased.⁷⁰³ By the reign of Edward I, as a result of ever increasing demands for manpower and resources caused by wars in France, Wales and Scotland, indentures for military service became increasingly common.⁷⁰⁴

Many Anglo-Irish magnates made use of indentures in this capacity. A 1308 contract between Edmund Butler and William de Burgh bound the latter to “mak[e] military retinue” with Butler and his heirs in exchange for two villates of land.⁷⁰⁵ A different indenture, dated 1313, bound Adam de la Roche “to take the arms of Sir Edmund and to abide with him as one of his men”.⁷⁰⁶ No such indenture between de Clare and his Geraldine allies survived, but a 1282 writ suggests one might have once been in effect. The missive orders its recipients to inform Thomas de Clare that the king “approves of his retaining Thomas Fitz Maurice to resist the forces of some persons who strive to infringe the peace.”⁷⁰⁷ Given that the sons of Fitz Maurice held land of de Clare – as did de Burgh in Butler’s lordship – it is possible they were bound to assist the lords of Thomond in very similar terms. These men – and the soldiers they themselves could muster – would have formed a significant part of the de Clares’ coalition of allies. They were not, however, the only ones.

Not all men serving in English armies were English. On the contrary, sources indicate that magnates made systematic use of Irish kerns. An account of wages paid to an army led by the deputy justiciar William de Burgh in 1308, already mentioned in section 3.4., “The Making of War”, above, lists only 16 *equis coopertis* to 161 *hobelarii* and 628 *pedites* (foot soldiers). Of these, 113 *hobelarii* and 337 *pedites*, or roughly 55% of army, were under control of commanders with Irish names.⁷⁰⁸ The names of the Irish commanders listed in the payroll further elucidate the terms by which these men were retained. Among them are Ruaidhrí Ó Conchobhair, of the Uí Conchobhair kings of Connacht; six men with the last

703 JONES, Michael; WALKER, Simon, *Private Indentures for Life Service in Peace and War 1278–1476*, **Royal Historical Society Camden Fifth Series**, v. 3, p. 1–190, 1994, p. 13.

704 *Ibid.*, p. 15.

705 CURTIS, Edmund. (Org.) **Calendar of Ormond Deeds vol. I 1172–1350**. Dublin: The Stationary Office, 1932. Available at: <<https://www.irishmanuscripts.ie/product/calendar-of-ormond-deeds-vol-i-1172-1350-6-vols-1932-43/>>. Access date: 26 May 2020., p. 166 no. 420.

706 *Ibid.*, p. 191–92 no 478.

707 SWEETMAN (Org.), **Calendar of Documents Relating to Ireland, 1252-1284**, p. 458 No. 2005.CDI 1252-1284 n. 2005 p. 458

708 CONNOLLY, *An Account of Military Expenditure in Leinster, 1308*.

name “Okelly” (the Uí Cheallaigh, kings of Uí Maine) and one “Magno Omadidan” (possibly Melachlin Ó Madadháin, of the Uí Mhadadháin of Síol Anmchadha who, like Ó Cheallaigh, is mentioned by the CT fighting alongside de Burgh on behalf of Clann Taidhg.⁷⁰⁹ These were important members of the local Irish aristocratic elite, on whom de Burgh, as the English lord of Connacht, would have exerted the same authority de Clare aspired to exercise over the kings of Thomond and their subkings. The evidence in these sources suggest that de Burgh did far more than field Irish soldiers or incorporate native tactics. He bound Gaelic chiefs to his service in a manner not unlike an Irish overking.

The de Burghs were not the only English magnates who successfully earned a place for themselves in native Irish politics. A 1336 indenture between James Butler, the Earl of Ormond, and the Irish of O’Kennedy (Uí Cinnéide) and Clangillekevynboy stipulate a lengthy list of rights and obligations, including the duty to assist the earl in war. The contract compels the Irish to serve in the earl’s army “as it is fitting and as it was in his and his ancestors habit to serve”, a phrase that suggests that the obligation was observed long before it was formalized in an indenture.⁷¹⁰ That the Butlers were well-used to using kerns is suggested by the CT, which mentions the “battle-armed kern of Butler” (*ceithern chatarmach [...] in Bhuitiléir*) among Muirchertach Ó Briain of Clann Tadhg’s allies in 1313.⁷¹¹

If the de Clares ever indentured Irish chiefs in similar terms, these contracts have not survived. However, as illustrated above, mentions of Irish and English armies fighting side by side are plentiful in the CT.⁷¹² It is not difficult to understand why. Irish troops were cheap, plentiful and well adapted to the local conditions of warfare. Nevertheless, they were also onerous to the manorial economy, as the reprimands of the central government against the

709 “Rory Okonehur pro duodecim hobelariis et quinquaginta peditibus et Tayg Okelly pro xvj hobelariis xlij peditibus et Loghlyn Roth' pro xij hobelariis et Hugoni de Burgo pro duobus equis coopertis et xxij hobelariis iij^xij peditibus et Odoni filio Donati Okelly pro xxiiij hobelariis lix peditibus et Many Okelly pro duodecim hobelariis viginti et uno peditibus et Johanni filio Simonis Okelly pro quatuor hobelariis et octo peditibus et Johanni Omadidan pro vij hobelariis xlij peditibus et Art Roth' pro duobus hobelariis et decern peditibus et Magno Okelly pro quinque hobelariis iijxxiiij peditibus et Thomultagh' Okelly pro uno hobelario xxj peditibus.” *Ibid.*, p. 4. “triallas i gConnachtaib ina diaid sin d’fios Uilliam Búrc agus Taidg í Chellaig, mar a bfuair onóir agus oirbidin; go dtuc leis i dtús in fogmair ba nesa rúta ruatharborb in rigbúrcaig agus gasrada mermenmnacha mainech im Tadhg cos cairghlecach O Cellaig, agus siol nágmar nárdaiagentach nAnmchada im Maolsechlainn O Madadháin.” O’GRADY (Org.), **Caithréim Thoirdealbhaigh**, p. 8.

710 “Praetera idem O Kenedy concedit respondere dicto Domino suo in exercitu suo prout decet et solebat respondere sibi et antecessoribus suis et quicumque Anglici vel Hibernici insurgent contra Dominum idem O Kenedy cum suis insurgent contra ipsos in auxilio Domini.” CURTIS, Edmund. (Org.) **Calendar of Ormond Deeds vol. I 1172–1350**, p. 289 no. 682. (Author’s translation).

711 “táinic fós sin bfeadain sin rúta rigUilliam rósaigte roscálainn baschuirr bántróigthig beoda binnchomairlig Búrc agus ceithern chatharmach chneiseídigte bhorbláidir bhuaninnsaigtech in Bhuitiléir”. O’GRADY (Org.), **Caithréim Thoirdealbhaigh**, p. 61.

712 See 3.4, “The Making of War”, above.

practice of coyne and livery never ceased to reiterate. The acts of the 1297 Dublin parliament chastised “magnates and others who keep kerns living continually at the expenses of others [...] for which the people is severely impoverished”.⁷¹³ Similar indictments appear in the 1331 Ordinances of Westminster⁷¹⁴, the 1351 Ordinances of Kilkenny⁷¹⁵ and the 1366 Statute of Kilkenny.⁷¹⁶ The *Miorbuile Senain* credit Richard de Clare’s death in Dysert O’Dea to divine retribution after his armies plundered lands in Corcabhaiscinn under the protection of St. Senan.⁷¹⁷ The expedition in question probably never happened, but the existence of the episode suggests English magnates in Ireland billeted their armies on churches, notwithstanding how objectionable such a practice might have been seen in England.⁷¹⁸ Developed for a context of agropastoralism, low population density and frequent tribute warfare, the Irish billeting system would prove a burden to the English economy, as roving bands of *homines ociosos* – as demobilized kerns were called in English sources – turned on the local population and on a lords’ neighbours’, “in the marches as well as in the land of peace”.⁷¹⁹

The effects of environmental and economic extreme events

713 *Fuit eciam eadem Communitas multociens grauata per magnates et alios habentes kaernias viuentes continue sumptibus alienis tam in Marchiis quam in terra pacis per quod populus vehementis est depauperatus.* Acts of the Dublin Parliament, 1297. BERRY (Org.), **Statutes and Ordinances and Acts of the Parliament of Ireland, vol 1: King John to Henry V**, p. 202. Underlined letters are my own transcription

714 *"Item quod nullus manuteneat nec ducat kernos nec gentes vocatas Idelmen nisi in marchiis suis propriis, et ad custus eorumdem".* Ordinances of Westminster, 1331. *Ibid.*, p. 328.

715 *"Item notre seigneur le Roi defent sur forfeiture de vie et de membre que nul de quel estat ou condicion qil soit ne teigne kernys hobellours ne vdiuers gentz en terre de pees a greuer le loial poeple notre seigneur le Roi mes qi les voille tenir les teigne en la marche a ses coustages propres saunz rien prendre de nuly encountre sa volente."* Ordinances of Kilkenny, 1351. *Ibid.*, p. 376. Underlined letters are my own transcription

716 *Item, accorde est et assentz que nul home de quel estate ou condicion quil soit, sur forfeiture de vie et de membre teigne kerne hobellours ne hudyuers gentz en terre de peez a grever le loiall people de notre seigneur le Roy.* Statute of Kilkenny, 1366 *Ibid.*, p. 446. Underlined letters are my own transcription

717 *"Fecht ele da thainicc Risderd de Clara lion a thionoil go crich Corca Bascind, & do h-airccedh an tír léo, eter túaith & chill, & do sháraigh sé tempall Senáin."* PLUMMER (Org.), *The Miracles of Senan*, p. 12. (Author’s translation).

718 English sources attest that Prince Edward, before becoming king in 1272, drew ire for billeting his soldiers on churches. Cf. PRESTWICH, Michael, **War, politics, and finance under Edward I**, Totowa: Rowman & Littlefield, 1972, p. 18–19.

719 *Fuit eciam eadem Communitas multociens grauata per magnates et alios habentes kaernias viuentes continue sumptibus alienis tam in Marchiis quam in terra pacis per quod populus vehementis est depauperatus".* Acts of the Dublin Parliament, 1297. BERRY (Org.), **Statutes and Ordinances and Acts of the Parliament of Ireland, vol 1: King John to Henry V**, p. 202.

The section above synthesized the *modus operandi* of Irish and English economies in Thomond, as well as its relationship with the funding of campaigns. With this information in mind, we can now return to the discussion of economic and environmental troubles of the early 14th century, sketched out in Chapter 1, and hypothesize on how it may have affected the wars in Thomond.

Cattle murrains

As mentioned in Chapter 1, the Irish annals contain many references to widespread mortality of cattle. These episodes would have had a devastating impact on the wealth of the Uí Bhriain, compromising their reserve of livestock, which was their most ubiquitous means of exchange. These mortalities would also have an indirect impact on agriculture, commerce, and logistics, as cattle manure was used as fertilizer and oxen were sometimes employed as traction animals to haul goods over land.⁷²⁰

The murrains would also have had an effect on the English lordship of Thomond. As we have seen, cattle was usually the currency in which the English received tributes and plunder from the Irish. A significant mortality would have rendered the chiefs unable to pay rent, and diminish the returns of punitive raids. Lastly, it would have cut into the profits obtained from the sale of hides, which became an increasingly important commodity.

The Great Famine of 1314-1322 is indeed associated with a cattle panzootic believed to have been rinderpest or anthrax.⁷²¹ However, authors who have studied the effects of the pestilence in Ireland believe its worst effects were only felt in the island from the 1320s.⁷²² Timothy Newfield, in particular, notices that cattle mortalities prior to 1320 are generally attributed to poor weather and argues that they have no connection to the European cattle panzootic.⁷²³ That particular – and particularly deadly – mortality would have arrived in Thomond too late to have had an effect in the events of 1276-1318.

Sustained failure of appropriate weather

720 NEWFIELD, A cattle panzootic in early fourteenth-century Europe, p. 156.

721 *Ibid.*, p. 158.

722 CAMPBELL, Benchmarking medieval economic development: England, Wales, Scotland, and Ireland, c.1290, p. 919; LYONS, Mary C., Weather, Famine, Pestilence and Plague in Ireland 900-1500, in: CRAWFORD, E. Margaret (Org.), **Famine - The Irish Experience, 900-1900: Subsistence Crises and Famines in Ireland**, Edinburgh: John Donald, 1989.

723 NEWFIELD, A cattle panzootic in early fourteenth-century Europe, p. 161, note 24. Newfield p. 161, note 24

David Arnold cites the sustained failure of appropriate weather as one of the four possible scenarios for the onset of famine.⁷²⁴ William Chester Jordan regards it as an ubiquitous occurrence in pre-industrial world, as “only high rates and absolute quantities of storage and good distribution networks [...] would prevent malnutrition and increased mortality”.⁷²⁵

Inclement weather features prominently in the annals in the 1270s and 1280s and it is likely it played a role in the famines and shortages of the period. Abnormally long and cold winters could upset the harvest cycle, and severe rainfall led to erosion, compromising the fertility of the soil. The damage would certainly be magnified by the movement of troops, as well as cattle trampling and overgrazing. According to Jordan, the level of despoiling experienced by arable land depended on the drainage of the soil. Heavy, absorbent soils became, at worst, “vast muddy tracts” which could become productive again in a few harvests’ time. Light soils with poor drainage, on the other hand, could erode to the point of exposing the underlying bedrock, making the land completely barren.⁷²⁶

A survey of soil types and suitability carried out by Teagasc and the Environment Protection Agency (Fig. 32) shows that, in general, the soils of Co. Clare are profoundly vulnerable to water erosion. In the north-west, the Burren region is characterized by vast stretches of naked bedrock, itself a consequence of degradation due to deforestation and agricultural activity in the Bronze Age.⁷²⁷ These outcrops are surrounded by rendzinas (of the Burren and Crush varieties) and the typical calcareous brown earth Faoldrom, both of which are characterized by their extremely shallow profile.⁷²⁸

East and west of the Fergus river system, most of Co. Clare comprises deposits of peat – unsuitable to agriculture and animal husbandry – and gleys – soils with weak structure and poor drainage which are particularly prone to waterlogging.⁷²⁹ Gleysols are uninviting to cultivation “except in very favourable seasons”, and their suitability for pastoralism is also limited, as they are vulnerable to damage by grazing livestock.⁷³⁰ On the other end of the

724 ARNOLD, David, **Famine, Social Crises and Historical Change**, Oxford: Basil Blackwell, 1988.

725 JORDAN, **The Great Famine: Northern Europe in the Early Fourteenth Century**, p. 13.

726 *Ibid.*, p. 24–25.

727 DREW, D.P., Accelerated Soil Erosion in a Karst Area: The Burren, Western Ireland, **Journal of Hydrology**, v. 61, p. 113–124, 1983.

728 O’SULLIVAN, Lillian; REIDY, Brian; CREAMER, Rachel, Limestone Lowlands, *in*: **The Soils of Ireland**, Cham: Springer, 2018, p. 158.

729 FINCH, T.F., **Soils of County Clare**, Dublin: An Foras Taluntais, 1971, p. 27.

730 *Ibid.*

scale, the most suitable soils in the region are the well-drained luvisols and brown earths, which are concentrated in the center-south and the very east of the province.

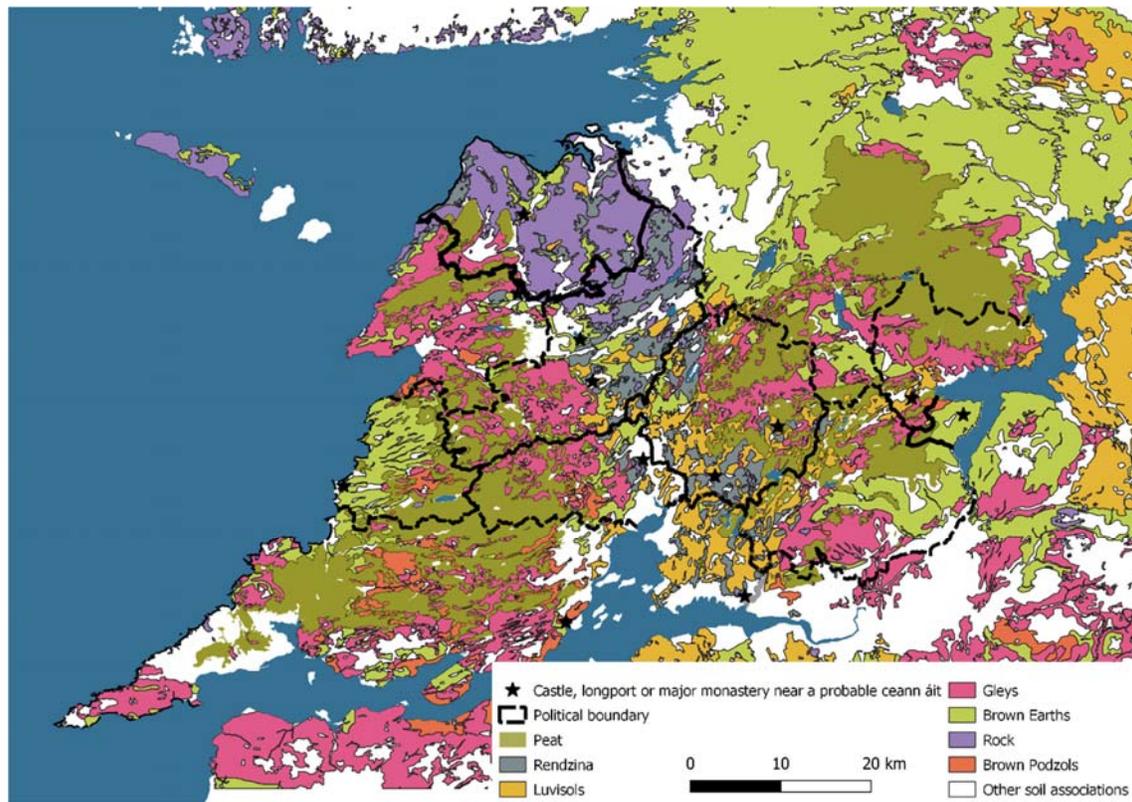


Figure 32: Major soil types in Co. Clare, according to Teagasc’s Irish Soil Information System.

A cursory look at the map in Fig.32 shows – perhaps unsurprisingly – a correlation between the soils with high suitability and settlements of political importance to the major lineages of 13th and 14th century Thomond. The center-south of the county contains large stretches of a soil known as Elton 1000a. The Elton series are “naturally moderately draining soils”, with “good agricultural potential”, “well-developed roots” and “a high base saturation with good nutrient retention”.⁷³¹ The north-eastern banks of River Shannon and Lough Derg, where the chiefdom of Uí Conghaile and the parish of Killaloe were located, are primarily constituted by Ballylanders. This soil belongs to a series with low natural nutrient status and

⁷³¹ O’SULLIVAN; REIDY; CREAMER, *Limestone Lowlands*, p. 155.

shallow profiles, but with “good water holding capacity” and the potential of being very productive if properly managed.⁷³² In the western coast, the kingdom of Uí Bhréacáin was similarly situated over a region of brown earths (of the Moord and Ashgrove associations, the latter of which can also be seen near Kilrush). Finally, parts of Corcabhaiscinn are constituted of brown podzols (of the Borrisoleigh association), a type of soil with lower natural nutrient status than brown earths, but similarly suitable for productive farming.⁷³³ Brown podzols are variations of brown earths that suffered increased leaching – i.e. loss of water-soluble material due to rain and/or irrigation. It is possible they were even more nutrient-rich in the 13th and 14th century, before centuries of inclement weather and cultivation gave them the current profile.

We can infer from this information that the manor of Bunratty and environs of Clonroad and Tulla were ideally situated to make use of the best arable land in Thomond. That the major lineages that controlled the region – the de Clares, the Uí Bhriain and the Mic Conmara of Clann Chúillen – were also the most powerful political actors during the wars of 1276-1318 may not be a coincidence. The space under the control of these lineages would be better suited to withstand extreme adverse weather, although the scale of devastation would depend on the kind of productive activity conducted in the region. The intensive cereal production in which the English manorial economy was based would be affected much harsher than Gaelic agropastoralism, all the more so if constant raiding hindered the efforts of tenants to manage and repair the soil.

Foreign wars and decline in trade

As I mentioned in Chapter 1, the damages caused by climate change, famine and military devastation on the Lordship of Ireland were compounded by two additional strains: the Crown’s reliance on purveyance to fund wars on Gascony, Wales and Scotland, and an overall period of commercial troubles that beset most of Western Europe. In Ireland, these issues were felt, by and large, by the bankruptcy of the Riccardi of Lucca, who were responsible for collecting customs at Irish ports, and the lack of demand for Irish wools among Flemish merchants, which deprived Ireland of a market for its exports.

732 O’SULLIVAN, Lilian; REIDY, Brian; CREAMER, Rachel, Rolling Lowlands, *in*: **The Soils of Ireland**, Cham: Springer, 2018, p. 171.

733 FINCH, **Soils of County Clare**, p. 17.

Unfortunately, it is impossible to determine how these developments affected the English and Irish in Thomond relying on the kind of evidence brought forth thus far. 13th and 14th century commerce, like diplomacy and the “marriage market”, was a complex system of its own, with interlocking pieces stretching from Bunratty to Baghdad and beyond. Modeling its general mechanisms would require a much broader and high lever conceptual framework, and the relatively sparse administrative sources for the de Clare lordship do not give us enough data to estimate its impacts on the local level.

We can assume that relentless purveyance reduced surplus of cereals and other victuals, consequently increasing the costs of provisions across Ireland. Even if the de Clares themselves were exempted from contributing, they would have a more difficult time procuring provisions, as there would be less grain and supplies on the market. Anything more precise than these vague remarks, however, would require information our sources simply do not possess.

Conclusion

The outline above suggests the environmental and economic troubles of the 1290s onward may have taken a heavy toll in the English efforts of pacify Thomond. Still, there is reason to believe these issues alone could not have precipitated the end of de Clares’ lordship.

In this regard, the achievements of the Geraldines of Desmond offer a relevant counterpoint. In the beginning of our period, this family managed their estates towards an economic model based on arable demesne and the export of grain.⁷³⁴ As the conditions changed, however, they were able to adequately transition to a “more productive model which reflected the limitations and strengths of the local landscape and the local realities”.⁷³⁵ Waters remarks that the mention of fish ponds, rabbit warrens, and turf pits in Thomas fitz Maurice’s inquisition post-mortem, small as the revenue generated by these assets were, was a sign that fitz Maurice was attempting to diversify his sources of income by exploiting “all available opportunities”.⁷³⁶ Similar efforts can be seen in Thomas de Clare’s 1287 inquisition, which mentions, among others, a turbary rendering 13s 4d in Inchiquin, a gardens rendering

734 WATERS, *The Earls of Desmond in the Fourteenth Century*, p. 201.

735 *Ibid.*

736 *Ibid.*, p. 197.

2s at Any and 4s in Balyduwil, and rabbits warrens rendering 2s (Any) and 3s 4d (Bunratty) and a fish pond rendering 20s/year, also in Bunratty.⁷³⁷

More importantly, the Geraldines of Desmond seem to have slowly adapted to accommodate agropastoralism as their main economic activity. The export of grain in the earls' manors gradually gave way to the export of wool, sheepskin and cow hides. In some parts of the lordship – such as the Dingle peninsula, which due to its geography is unsuited to arable farming – this trend can be seen as early as the 13th century.⁷³⁸ In the late 14th and 15th centuries, they became involved in the fishing of herring, which grew to become Ireland's most profitable export⁷³⁹

The case of Desmond suggests that the de Clares, like their Geraldine allies, could have arguably been able to overcome the economic and environmental challenges of 1290-1318 had they only had time to adapt. The success of the Desmond magnates also suggest that it is to the immediate political conditions – not the least of which the death of the heirless Thomas de Clare in 1321 – that we should ultimately look for an explanation on why their lordship was short-lived.

Persuasive as this hypothesis is, it leaves out the possibility that these issues might have been catalysts for the political troubles of the de Clares. To analyse how these two spheres of activity might have fed into each other as conditions worsened, we must resort to modelling.

3.6. Model

As explained in Chapter 1 above, ABMs are characterized by three main elements: agents, an environment, and the procedures that determine their interactions. The following section is a preliminary attempt to showcase the features that will integrate the final model. When variations exist between the ABM and its companion board game, *The Triumphs of Turlough*, they will be spelled out as well.

Agents

737 SWEETMAN (Org.), *Calendar of Documents Relating to Ireland, 1285-1292*, p. 202–206 No. 459.

738 WATERS, *The Earls of Desmond in the Fourteenth Century*, p. 197–198.

739 *Ibid.*, p. 201; O'NEILL, *Merchants and Mariners in Medieval Ireland*, p. 31–37.

Turtles

The model will be populated by agents representing the secular elites in 13th -14th century Thomond. These agents are quasi-individuals: while they are modelled as a single entity – or “turtle” in NetLogo jargon – they embody not only the ruling chief or magnate, but also their agents, council, family members – and, during military expeditions, commanders and armies. As explained in section 2, the settlements of the model (monasteries, castles, and *longphoirt*) and the nodes of its spatial network will also be implemented as turtles.

There are two “breeds” (or classes) of agents in the model: *magnates* and *rithe*. The first represent Thomas and Richard de Clare. The second represent the Irish kings of Thomond. They are divided into three sub-breeds:

Ruling king of Thomond: represents the Uí Bhriain lineage (Clann Taidhg or Clann Brian Ruad) who currently holds the kingdom of Thomond.

Exiled king of Thomond: represents the Uí Bhriain lineage who is currently exiled.

Subkings: Represent the ruling lineages of the smaller *túatha* in Thomond.

Mathgamhain Ó Briain: Represents Mathgamháin Ó Briain [8], *tánaiste* of Clann Brian Ruad. Mathgamhain is a special subking endowed with some of the properties of the ruling king of Thomond.

Political bonds

Magnates and *rithe* were connected by many different social and political bonds.

NetLogo possesses a type of agent specifically designed to model these social relationships: links. As the name implies, they are a special type of agent that connect turtles together. If visible at all, they are represented by lines, not unlike the connections in a social network diagram. There are two kinds of link-agents: *undirected* – representing bilateral or symmetrical relationships – and *directed* – representing asymmetrical ties that go *from* one agent (the “out” neighbour) to another (the “in” neighbour).

In ThomondSim, some bonds will be represented as links; others will be abstracted in manners described below:

Alliances stand for ties of marriage, fosterage or otherwise longstanding agreements between agents. These bonds orient their preferences and remain in place throughout the

simulation. Allies will always help each other unless other circumstances prevent them from doing so. Agents allied to one another can billet their armies in one another's settlements.

In ThomondSim, alliances are represented as a turtle attribute called `loyalty`. It exists in three different states: 0 (neutral), 1 (supporting Clann Briain Ruaid), and 2 (supporting Clann Taidhg).

Historically, network alliances in Thomond remained somewhat consistent, although some significant variations can be observed during the nearly 40 years of conflict. Unfortunately, the factors that led to these relationships being formed in the first place depend on circumstances impacted by events outside the confines of Thomond, that are sparsely documented and/or that cannot be easily reduced to procedures in a formal simulation within the limited scope of this thesis. To err on the side of epistemic caution, I have therefore decided to treat the alliance network as a static, rather than an evolutionary component of the model.

To deal with the shifting nature of the network in the absence of such dynamics, I have added a chooser (Fig. 33) to the model's interface that allows the user to circle through several starting dates. Each date will load the model with an alliance network consistent to that in vogue during that period.

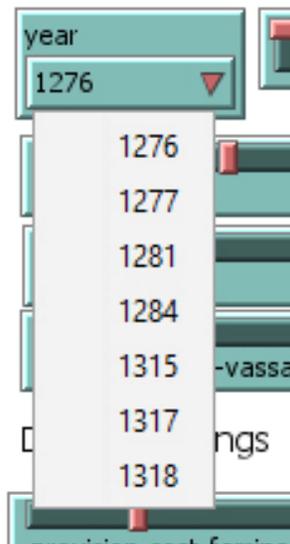


Figure 33: Year chooser in ThomondSim's interface

Submission. All *ríthe* in Thomond owed certain duties to the ruling king, and the king itself owed tribute and obedience to the de Clares. The hierarchy of overlordship in the model corresponds to Figure 34.

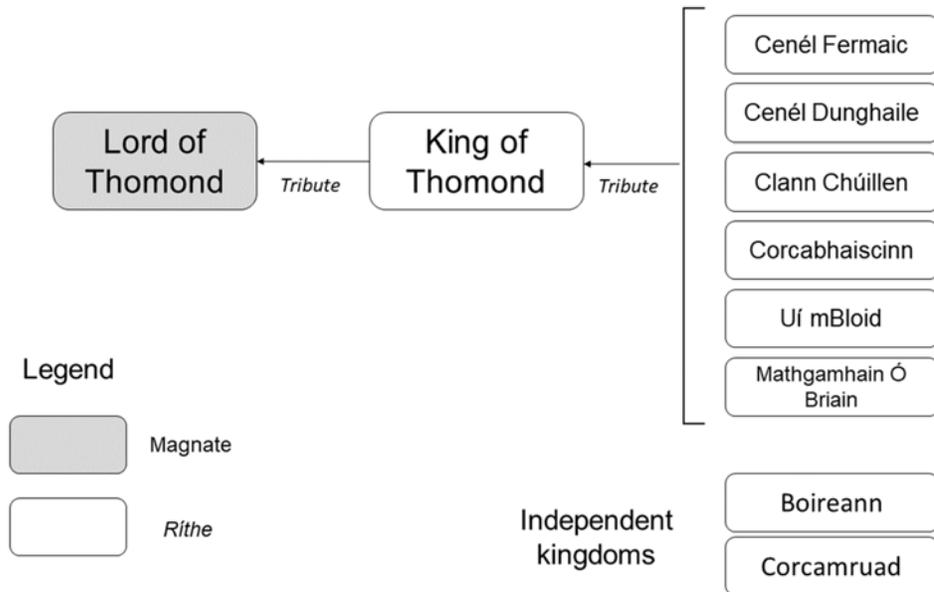


Figure 34: Political hierarchy in the model

In ThomondSim, these bonds of submission will, like alliances, be represented abstractly. Agents with a opposite `loyalty` in relation to the ruling king (e.g. 1 vs 2) will disregard procedures related to tributes and military mobilization. Neutral agents (i.e. with a `loyalty` of 0) may be approached by pretenders from Clann Taidhg and Clann Briain Ruaid, as well as by the *tánaiste* and persuaded to join a coalition. Agents decide whether or not to accept based on a) their own material conditions and stability, represented by the `integrity` of their *ceann áit* and their `febas` attribute⁷⁴⁰, respectively; and b) the `army-strength` of the coalition, versus that of their opponents.

Hostages work similarly to alliances, but are implemented as actual links. These links are directional in nature, bonding a hostage holder to a hostage giver. Hostage givers are

⁷⁴⁰ See “Attributes”, below.

forced to pay tributes and comply with military service to their holders in spite of any previous *alliance* links. Only the ruling king of Thomond and Mathgamhain Ó Briain can take hostages.

Unlike *alliances*, *hostages* are not permanent. Any links of this kind will disappear if the holder is exiled (in the case of a king of Thomond) or is defeated in combat.

They will also disappear if the hostage giver fails to comply with the holder's wishes (e.g. by failing to mobilize for war due to lacking the resources for doing so). Letting a hostage die reduces an agent's `febas`.

In *The Triumphs of Turlough*, hostages are represented by a specific piece, surrendered by the hostage giver to the hostage holder. They return to the original player if the link is broken by any reason.

Attributes

Attributes represents the intrinsic characteristics of different elements of the model, as well as things they may own or suffer.

Global variables

Global variables are accessible to all agents in the simulation. They represent general characteristics of the scenarii being run. In ThomondSim, they also include many variables that are necessary to either facilitate experimentation or let the model run properly. These will not be included here, but can be consulted in the ABM's code.⁷⁴¹

`cattle-cost`: price at which cows can be bought and sold

`provision-cost`: prices at which provisions can be bought and sold

`Bunratty-income` and `external-income`: annual income from de Clare's lands in Thomond and elsewhere.

741 Cf. MARINO CARVALHO, Vinicius. **ThomondSim**. Version 1.0.0., 4 Feb. 2022. In: CoMSES Computational Model Library. Available at: < <https://www.comses.net/codebases/e28ff06b-13b0-4503-9877-9e89674e343e/releases/1.0.0/>> Access Date: 4 Feb. 2022.

Income is measure in a variable called pounds which, despite the name, does not correspond to exactly one pound. Rather than trying to faithfully reconstruct de Clare’s finances down to the last penny – something in which our sources are not reliable enough to help – I decided to focus instead on the relative importance of local versus external income according to Thomas de Clare’s inquisition post-mortem. Thus, `Bunratty-income` has a base value of 7 pounds (one per each settlement under de Clare’s control), and `external-income`, of 18 pounds, reflecting the fact that over a third of the magnate’s income historically came from Thomond.

`active-hazard`: which extreme event is currently affecting the simulation. Disasters affect both the environment and the human agents, and also increase the likelihood of other extreme events. Table 6 has a list of disaster types and their description.

Hazard	Effect	Increase likelihood of
Heavy rainfall	Reduces <code>integrity</code> of settlements	Harvest failure Liver fluke disease
Harvest failure	Reduces <code>Bunratty-income</code> and <code>external-income</code>	Famine
Liver fluke disease	Reduces <code>cattle</code> of all agents	
Famine	Increases <code>provision-cost</code> and <code>cattle-cost</code>	
Foreign war	Increases <code>provision-cost</code>	

Table 6: Types of hazards and their effects in ThomondSim

Agent attributes

`pounds`: currency used by English magnates. Used to pay for provisions and soldiers (i.e. bolstering their army-strength).

`cattle`: resource used as currency by *rithe*. Can also be obtained from settlements by raiding them, or (in the case of magnates), by receiving tribute from Irish allies. Cattle can be used by rithe to pay for soldiers, and by both *rithe* and magnates as a substitute to provisions.

provisions: food and other supplies used to provide for an army on the move. Agents consume provisions every time they end their march outside a settlement during the expedition phase. If an agent runs out of provisions or cannot find a non-destroyed settlement in which to rest, its army will desert.

army-strength: the combined military strength of an agent. Strength is represented by a cardinal scale from 1 to 10, matching the average armies fielded in the period on a scale of 1:10. A minimum strength of 1, therefore, equals 100 soldiers; a maximum strength of 10, 1000 men.

move-points: how much distance an army can cover in a single day's march.

febas: from the Irish word meaning "excellence", **febas** is an abstract measure of the political capital of a *rí*. The attribute increases the more successful an agent's role in the war is, and decreases with every setback (e.g. by losing battles or sacrificing hostages).

In ThomondSim, **febas** indirectly determines the run duration: the simulation is set to stop as soon as one of the claimants (Clann Taidhg or Clann Brian Ruad) reaches 0 **febas**. In *The Triumphs of Turlough*, it is the attribute that dictates the victory conditions: the game is won by making the opponents run out of *febas* points.

pretender?: In ThomondSim, marks an Irish agent as one of the head factions of the civil war (Clann Taidhg or Clann Briain Ruaid). There are always two pretenders in the simulation. Whether they start in power, exiled, or partitioning the kingdom between them depends on the starting scenario.

Mobilizer?: marks a *rí* as a mobilizer. This gives an agent the power to mobilize other agents during the expedition phase and to take hostages. They represent high-ranking Irish aristocrats who belonged to the Uí Bhriain, the chief lineage of the kings of Thomond. There are three mobilizers in the simulation: the two pretenders and the *Tánaiste*.

king-of-thomond?: marks a pretender as the current king of Thomond.

Exiled?: marks a pretender who was ousted or defeated in the expedition phase. When one pretender is exiled, the other one automatically becomes king of Thomond.

Model schedule

Time is an essential component of ABM. The capacity to represent not only the fundamental elements of a social system, but how they change and evolve over time is what

differentiates simulations from other genres of model-based history. In ABM, the passing of time is divided into discrete units called “ticks”. In the schedule outline in Figure 34, ticks represent phases of a larger cycle of actions representing the preparation of a short scale military expedition. This cycle is divided into three phases: *pre-maintenance*, *maintenance* and *expedition*.

The *maintenance* phase lasts a single tick and represents economic events and diplomatic decisions that took place in the months prior to the yearly season of warfare.

The *expedition* phase represents the actions taken during an expedition, such as raising levies, mustering provisions, marching, fighting and exacting submission. Each tick in the *action* phase represents a single day’s march, and the phase itself ends when all the agents have demobilized.

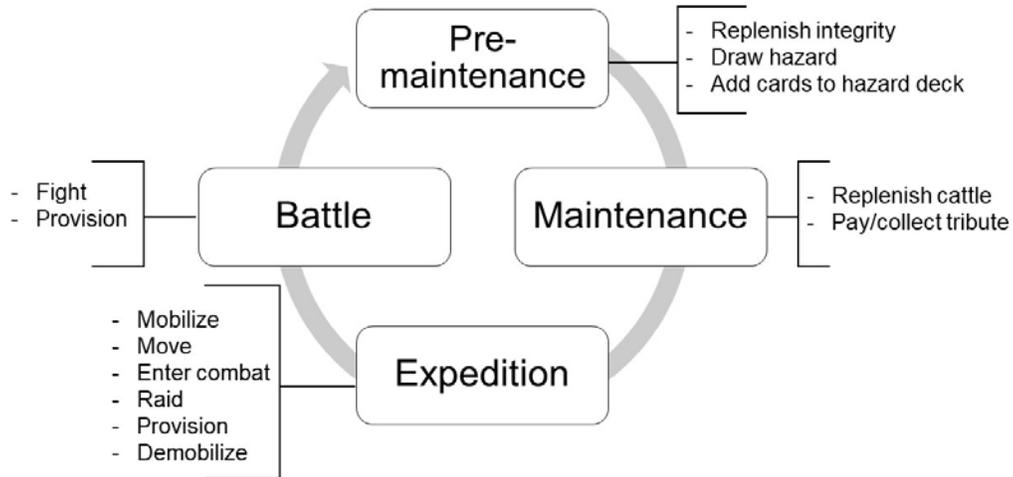


Figure 35: The model's schedule

In *The Triumphs of Turlough*, this schedule informs the round structure. For more details about its implementation in the board game, see Appendix 2, below.

Elements of the schedule

In ThomondSim, the different steps of this schedule are implemented as procedures: elements of code that represents actions taken or suffered by agents in the model. They are structured as routines of commands, which are themselves divided in sub-procedures, up to a list of primitives that constitute the basis of the programming language in question. In the *Triumphs of Turlough*, the equivalent to procedures are the game rules.

Below is a list of the procedures/rules that comprise the graph in figure 34. In ThomondSim, most of these procedures are divided into a number of sub-procedures. In addition, there are specific procedures to ensure the simulation runs smooth, does not

crash, and to facilitate data exportation and experimentation. For information on these commands, the reader may consult the notes in the code.⁷⁴²

As in section 2.6. above, when an explanation specifically mentions a ThomondSim procedure or variable, its name will be rendered in a different font (ex. `provisions`). Otherwise, it refers to a general element of the conceptual model that may be implemented differently in the ABM (e.g., subdivided into many sub-procedures).

Replenish integrity: Settlements replenish part of the `integrity` lost through hazards and military action.

Draw Hazard: a hazard is selected and its effects on the agents and/or environment are computed.

Hazards are chosen randomly out of a pool of events determined by the starting date. (Table 7). This “hazard reserve” is represented as a deck of cards in *The Triumphs of Turlough*, and as a “virtual deck” in ThomondSim: the system spawns, counts and manages “card-agents” that do not otherwise have an effect on the environment.

The hazards of 13th century “decks” are mostly comprised of rainfall and war events, representing the weather changes and impacts of purveyance on grain prices during Edward I’s foreign wars. The 1315, 1317 and 1318 decks, on the other hand, progressively lean towards harvest failures and famines, representing the beginning of the Great European Famine.

Scenario	Hazard deck
1276 1277, 1281, and 1284	12x Heavy rainfall 10x Foreign war 3x Harvest failure
1315	5x Heavy rainfall 6x Liver fluke disease 5x Foreign war 5x Harvest failure 4x Famine

1317 and 1318	3x Heavy rainfall
	2x Liver fluke disease
	5x Foreign war
	5x Harvest failure
	10x famine

Table 7: Composition of hazard decks in ThomondSim and The Triumphs of Turlough

Add card to hazard deck: Hazards that affect the likelihood of other hazards (see Table 6) have their effects calculated, and the decks are reshuffled accordingly.

Replenish cattle: Agents recover some of the `cattle` lost in previous rounds.

Pay/Collect tribute: Allied vassals and/or players who have given hostages to the king of Thomond transfer some of their cattle to the ruling faction.

If the faction in question has given a hostage to de Clare, it transfers cattle to the English magnate as well.

de Clare owes no tributes to any agent. During their maintenance, they receive a quantity of `pounds` equal to `Bunratty-income` plus `external-income`.

Mobilize: This step represents an agent's intention to raise an army and go to war. In practical terms, it gives an agent the ability to move around the map, interact with settlements and attack other agents.

Agents cannot mobilize at will. This procedure is only triggered when one of the following five conditions are met:

- a) *At the beginning of the expedition phase:* if de Clare does not hold the hostages of the ruling king of Thomond, he will automatically mobilize as soon as the maintenance phase ends. This represents an attempt to expel the ruling lineage and set up their rivals as vassal kings. If de Clare holds the hostages of the king, the exiled king of Thomond will mobilize at the beginning of this phase instead. This represents the attempt of an Uí Bhriain *rí* opposed to de Clare to tack his kingdom back.

- b) *Upon being attacked*: if a non-mobilized agent is attacked and succeeds in disengaging the attacker⁷⁴³, it will mobilize with a token force (i.e. army strength of 1). This represents the household soldiers or standing garrison that were always by their liege's side.
- c) *Upon being summoned*: the ruling king of Thomond, exiled king of Thomond or Mathgamhain Ó Briain can force subkings to mobilize by travelling to their *ceann áit*. These agents will then have a choice between accepting the summons and going forth with the procedure or refusing and being forced to give hostages.
- d) *Upon hearing the news*: After one full round has passed, all agents may mobilize at will. This represents the fact that news of a battle or military invasion travelled thanks to scouts or third-parties.
- e) *Upon retaking Clonroad (The Triumphs of Turlough only)*: if de Clare succeeds in taking Clonroad from the ruling king of Thomond, the exiled king of Thomond will join the simulation as an independent agent and mobilize his forces. For the reason why this rule was not included in ThomondSim, see Chapter 4 below.

Once mobilized, agents have the opportunity to purchase `army-strength` and `provisions` (in the case of magnates). `army-strength` must be exchanged by `pounds` or `cattle`. If the agent is a *ri* and does not have enough of either resource, they may choose to supply an army via coyne & livery, in which case each purchased `army-strength` rank decreases the integrity of one's *ceann áit* by 1.

In ThomondSim, agents are programmed to prioritize resources over compromising `integrity`. In *The Triumphs of Turlough*, the players have complete freedom to choose how to pay for their armies.

Additionally, agents in ThomondSim assume NetLogo's default arrow shape, rather than their original chess king/knight shape. This measure helps users visualize which agents are mobilized and in which direction they are headed.

⁷⁴³ See "Disengage", below

Move: Mobilized agents move around the network environment to either attack enemies, protect their holdings, raid enemy settlements, provision or mobilize allies. See Chapter 2.6. “Model”, above, for more details.

Fight: The fight step represents combat between agents and the calculations to determine a winner. Accounting for something as unpredictable as battles and skirmishes in a formal model is no easy task, and warrants some methodological explanations.

As Clausewitz wisely stated, all the information we could possibly gather in regards to military composition, quality and strength is merely a part of the problem: “only the element of chance is needed to make war a gamble, and that element is never absent”.⁷⁴⁴ It is precisely from this element, perhaps, that the distrust of professional historians against military history originates. The idea that the fate of a whole kingdom may hinge on a king’s want of a horse, as Shakespeare once put it, sounds antithetical to our efforts to explain the past in terms of processes, regularities and systematic features. Unfortunately, the inherent unpredictability of battles is very much part of human history. Had Richard de Clare not been killed in Dysert O’Dea in 1318, the Uí Bhriain and Mic Conmara arguably would not have gobbled up his former lands so quickly, and the balance of power in Thomond would not have changed so drastically. Had Strongbow been defeated in his invasion of Ireland in 1169, the English Lordship of Ireland would not have been established the way it was – perhaps, not at all. Had William I met his end at Hastings, Diarmait Mac Murchadha would never have had a Henry II to seek help from, as the very dynasty from which he hailed would not have been established.

It is vital, therefore, that a model of war of economy in Thomond includes a means of calculating the outcome of battles. Unfortunately, when matters of chance are concerned, the line separating responsible modeling from educated guesswork is a very fine one. Accounting for every single factor that could steer the results of military engagements is an extremely hard – if not impossible – computational problem. It would also be foolhardy, given that the evidence at our disposal is often missing, incomplete or unreliable. Most of the descriptions of battles in Thomond during the years 1276 and 1318 – including the final and most important at Dysert O’Dea – come exclusively from the CT. The danger of relying exclusively on a single source is always

744 CLAUSEWITZ, *On War*, p. 85.

high, and that is particularly true for the CT which seems to have taken some dangerous discursive liberties in the fine lines of its description. Its accounts of battles and military tactics is directly inspired by *In Cath Catharda* (lit. “The Civil Battle”, also known as *In Cogadh Catharda* or “The Civil War”), an Irish adaptation of Lucan’s *Pharsalia*, an account of the Roman Civil War. The literary borrowings were noted by CT’s editor Standish O’Grady himself, who included the *In Cath Catharda* as an appendix in the original publication.⁷⁴⁵ As a result, although Robin Frame has once commented that the CT conveys “the sound – indeed almost the smell – of combat in Ireland”⁷⁴⁶ the truth is that very little of this description can actually be salvaged for the study of medieval Irish history.

One means of solving this problem is to seek inspiration in those who have devoted time and energy to predict battles in which they have a personal role: military strategists themselves. Throughout the centuries, warfare analysts have perfected many types of predictive combat modeling, ranging from wargames and Monte Carlo experiments to simple equation-based models. The most famous of the latter is class of models known in operations research as Lanchester’s laws.⁷⁴⁷ Conceived by aeronautical engineer Frederick Lanchester in 1916, they were an attempt to use equations to predict outcomes and casualty rates of military engagements. These models worked by assuming relationships between the force size of two belligerent forces and the combat efficiency of their troops, striving to answer an age-old question of military theory: what is the most accurate predictor of military victories? The quantity of troops deployed or the quality of combatants?

Lanchester’s models are surprisingly simple and rely on just two inputs: the size of both forces and the resulting number of casualties. The exact relationship between these variables obviously varied with the type of war being waged. Lanchester originally devised two classes of equations to represent different combat paradigms during the history of warfare. The most famous one, known as Lanchester’s square law, was designed to model long-range battles after the advent of firearms.⁷⁴⁸ The lesser known one (albeit more interesting for our purposes) is called Lanchester’s linear law. Unlike

745 O’GRADY (Org.), *Caithréim Thoirdhealbhagh*, p. 193–226.

746 FRAME, Robin, *War and Peace in the Medieval Lordship of Ireland*, in: **Ireland and Britain 1170-1450**, London/Rio Grande: Hambledon Press, 1998, p. 223.

747 LANCHESTER, Frederick William, *Mathematics in Warfare*, in: NEWMAN, James R. (Org.), **The World of Mathematics**, London: George Allen and Unwin, 1956, v. 4, p. 2138–2159.

748 *Ibid.*, p. 2140.

its “modern” counterpart, it intended to represent large-scale melees fought by phalanxes or shield walls – although it has also proved useful to understand indirect fire confrontations like artillery strikes.⁷⁴⁹ In this type of conflict, each combatant usually faces a single opponent at a time. A 20-to-1 numerical advantage does not mean that an outnumbered warrior would be targeted by 20 opponents at once, as there would not be enough space for such a massive number of soldiers to be in combat range at the same time.

To account for this numerical property, Lanchester’s linear law assumes fighting ability to be just as important as strength in numbers – albeit only just so. An army twice as efficiency as their opponents’ will be a match for a force twice its size, but will still be defeated by an enemy three or four times as numerous. Even a supernaturally gifted army will eventually be overwhelmed by an endless horde of opponents.

This is represented algebraically by the product of an army’s force size and combat efficiency, as seen in the formulae below:

$bB = rR$	Tie
$bB < rR$	Red force wins
$bB > rR$	Blue force wins

In which:

B = Blue force size

b = Blue combat efficiency

R = Red force size

r = Red combat efficiency

If the overall fighting strength (size x efficiency) of both armies are equal, both are destroyed in a theoretical fight to the bitter end. Yet, if one side’s fighting strength surpasses the other’s, the strongest will walk out as victor.

To calculate exactly how many men were lost during battle, Lanchester designed the formulae below:

749 LEPINGWELL, John W. R., *The Laws of Combat? Lanchester Reexamined*, **International Security**, v. 12, n. 1, p. 89–134, 1987, p. 100.

$$B_{t+1} = B_t - rB_tR_t$$

$$R_{t+1} = R_t - bR_tB_t$$

In which

B_{t+1} = Blue force size at the end of combat phase

R_{t+1} = Red force size at the end of combat phase

B_t = Blue force size at the beginning of combat phase

R_t = Red force size at the beginning of combat phase

b = Blue combat efficiency

r = Red combat efficiency

These models can theoretically be tested against historical data by using our estimates of the actual size of armies as the initial force sizes ($B_{t=0}$ and $R_{t=0}$). Each run of the model calculates a fraction of the total casualties based on the current number of combatants. The more casualties a force suffers, the less it inflicts, representing the cumulative effect of losses as armies are whittled down. The equations are solved repeated times until we arrive at the same number of casualties mentioned in historical record. If the results fit – i.e. the historical winners actually win, and the losses are reasonably faithful to the available evidence – the model is probably a good match. If it does not, we might be dealing with faulty data or an altogether different combat paradigm. Of course, even if we only account for the broad strokes of Lanchester’s argument, we still have to account for the very elusive concept of “battle efficiency”. Xavier Rubio-Campillo tentatively calculated an army’s combat efficiency as $b = \frac{100}{B_{t=0}R_{t=0}}$ – In which $B_{t=0}$ and $R_{t=0}$ are Blue and Red’s total force sizes at the beginning of the battle – and its enemy’s efficiency as $r = Pb$, in which P is an odds ratio determining how better or worse the enemy army is.⁷⁵⁰ A P of 0.5 means that the enemy force is only half as effective, whereas a P of 3 means that it fights three times as hard. This, of course, does little to help us, as we are still left with the problem of figuring out what the value of P is.

750 RUBIO-CAMPILLO, Xavier, Model Selection in Historical Research Using Approximate Bayesian Computation, **PLOS ONE**, v. 11, n. 1, p. e0146491, 2016, p. 8.

In the years since its original publications, authors from a diverse number of fields have improved on Lanchester’s original propositions, accounting for the effects of variables like morale, tactics and fatigue. Xavier Rubio-Campillo compared how some of these alternative proposals matched historical evidence by testing them with data from 1080 battles from the age of Pike and Shot in the 17th century to the emergence of the first industrialized armies between 1861 and 1905.⁷⁵¹ He found out that the most accurate equation is neither of Lanchester’s originals, but an alternative model that included the effects of fatigue in combat efficiency.⁷⁵²

Impressive as this theoretical effort is, it is questionable whether any of these models would be any practical to the study of the Wars of Thomond – or, at least, in the way originally envisioned by these scholars. First, the battles of the period are not well documented enough for this kind of fine casualty calculation to be possible, let alone useful. Second, there are not, to my knowledge, any version of Lanchester’s equations designed to model the specific *modus operandi* of Late Medieval Irish warfare. Even the considerable dataset assembled by Rubio-Campillo does no justice to the specificities of Irish combat, as neither of his battles are remotely comparable to military engagements in Medieval Ireland. Third, the validity of equation-based models of warfare is debatable even in the best scenarios.⁷⁵³ Military analysts would not have had need to resort to simulations and wargaming if simple equations was all it took to solve complex tactical problems.

The formulae below are my attempt to navigate this conundrum. It adopts the general logic of the Lanchester linear law, but avoids using data we have no way of obtaining and incorporate variables that seem to have been more relevant to Irish warfare. Unlike most variations of Lanchester’s models, I have chosen to ignore battle efficiency under the premise that the competing forces were, for the most part, equivalent in quality.

$$d^b + t^b = d^r + t^r \quad \text{Tie}$$

751 RUBIO-CAMPILLO, Model Selection in Historical Research Using Approximate Bayesian Computation.

752 The equations are: $B_{t+1} = B_t - \frac{rB_t}{\log(e+t)}$ and $R_{t+1} = R_t - \frac{bR_t}{\log(e+t)}$. See *Ibid.*, p. 8.

753 LEPINGWELL, The Laws of Combat?, p. 90.

$$d^b + t^b < d^r + t^r \quad \text{Red force wins}$$

$$d^b + t^b > d^r + t^r \quad \text{Blue force wins}$$

In which

d^b is the odds factor of the blue army

d^r is the odds factor of the red army

t^b is the terrain modifier for the blue army

t^r is the terrain modifier for the red army.

Army strength (or force size) is not factored in the combat calculations, but its absence respects the general logic of Lanchester’s linear law: because only a part of each army was involved in fighting at any given moment and combat width was determined by the smaller force (as soldiers could not engage multiple enemies at the same time), this parameter would have been identical in both sides of the equation or inequation.⁷⁵⁴ This makes it possible for smaller forces – aided by a little bit of luck – to hold their ground until reinforcements arrive, as they historically did in Dysert O’Dea.

t represents the effects of the local terrain, a factor whose importance for the outcome of battles is evident in the itineraries of commanders, who sometimes called off whole expeditions rather than risking engaging enemies in unfavorable ground.⁷⁵⁵ To facilitate its implementation in *The Triumphs of Turlough*, I have treated this modifier as an integer (Table 8). This makes it easy for players to calculate in their heads.

Terrain condition	Role	t
Bog	Both	-1
Forest	Defender	1
Water crossing	Defender	1

Table 8: t values for special terrain conditions

⁷⁵⁴ A preliminary version of this model used an army strength parameter A , equal to force size of the smallest army in combat, as a multiplier. However, it produced results that did not match historical record. See section 4.1., “Verification and Validation”, below, for details.

⁷⁵⁵ See Chapter 2.2. “Routeways and Movement” above.

Finally, d^b and d^r are random numbers from 1 to 6, representing the chance factor afflicting each army. Their range equals that of a d6 (i.e. a commercial six-sided die), thus making it the formula easily adaptable for *The Triumphs of Turlough*.

In the ABM, this procedure is repeated every tick until one of the belligerents exhausts its army strength.⁷⁵⁶ In *The Triumphs of Turlough*, this mechanic is executed once when attack is declared, then, at the end of the round, repeated until one of the armies runs out of soldiers. In practice, this sequential structure extends combat to a few ticks/turns, This increases the time needed to fight a battle, representing the historical length of these confrontations and allowing allies to join the fray.

Enter combat: In both ThomondSim and *The Triumphs of Turlough*, agents act and move in an asynchronous manner – i.e. one at a time. This, however, does not correspond to reality, where magnates and *riithe* mobilized their forces, marched and attacked enemy holdings at the same time. The outcome of many a campaign – not the least Dysert O’Dea, the most important of the war – would not have been the same had the belligerents been able to spot their enemies’ actions and react accordingly.

The *enter combat* step is designed to remedy this limitation. Every time an agent enters a node occupied by an enemy (or, in *The Triumphs of Turlough*, a hex), they are immediately locked into combat.

In practical terms, this entails executing the combat equation of the fight step a single time, as well as losing all remaining move-points. By the end of the expedition phase, they undertake the fight step, this time clashing to the death.

While seemingly small in scope, this rule allows other agents to abandon their actions and join their allies in battle, emulating the strategic turn of events that resulted in de Clare’s defeat in Dysert O’Dea.

Disengage: Medieval armies did not march in formation all the time, ready to engage any potential threat. Soldiers moved around in long columns and needed to be reorganized before facing an enemy. Forces that spotted each other would not be able to immediately face it other at full strength, and outnumbered armies could use this

756 See “Counting casualties”, below

window of opportunity to escape. The *disengage* procedure/mechanic seeks to model this dynamic.

Disengage is a variant of the *fight* procedure initiated when one agent attempts to avoid combat. Armies will disengage if they perceive themselves to be weaker than their enemy, if they have been ambushed, or if they are attacked while on disadvantageous terrain.

The *disengage* procedure follows the same formula as the *fight* procedure, except that variable *A* is always set at one. This is meant to represent the fact that these are skirmishes fought by small vanguard corps while the main army is still manoeuvring or attempting to escape.

Agents who manage to disengage will be able to move after being attacked, having thus a chance to look for better ground, flee or attempt to summon an ally or hostage giver. Due to its defensive nature, successful disengagements cause no casualties in the attacking army.

A non-mobilized agent who is attacked on its *ceann áit* will immediately execute this procedure against its attacker.

Counting casualties: This is a sub-procedure of both the *fight* and *disengage* commands. Every time an agent loses in a combat roll, its army strength will be reduced by 1.

When an agent's army strength reaches 0, the agent will demobilize and respawn at its *ceann áit*. Its remaining `cattle` is set to zero and its value is added to the `cattle` of the winning faction. If the surviving army is a ruling king of Thomond, an exiled king of Thomond or a *tánaiste*, a `hostage` link is also created between the winner and the loser.

Raid: The *raid* step represents the act of pillaging a settlement and the surrounding farmlands. Raiding increases `cattle` at the cost of increasing devastation in the settlement.

The devastation caused by a raiding army is proportional to their `army-strength`.

Provision: When mobilized agents can take no further action during a round – either because they ran out of move-points or because they were involved in a battle – they must provision their armies.

Each army-strength rank costs one cattle or pounds to be supplied. If the agent has no resources at their disposal, they may provide soldiers via coyne & livery, decreasing the `integrity` of any settlements on that node.

Armies can only muster provisions on settlements their coalition control (i.e. that have the same `loyalty` value).

If an agent cannot provision its soldiers, they will desert, resulting in a loss of `army-strength`.

In ThomondSim, agents will prioritize spending resources rather than decreasing `integrity` – and, in regards to the former, `provisions` over `cattle`, as the latter are more valuable and versatile. In *The Triumphs of Turlough*, on the other hand, players are free to supply their armies as they see fit.

Demobilize: a mobilized agent relinquishes its army-strength and moves back to its *ceann-áit* or capital. Agents demobilize if they are defeated in battle, if they fail to provision their soldiers or if the expedition is finished due to one of the Uí Bhriain pretenders being exiled.

In ThomondSim, agents possess a variable called `demobilized?` that tracks whether they have already mobilized that turn. Demobilized agents cannot remobilize again until the next turn.

Chapter 4:

The Model in Action

In the previous chapters, I analysed sources related to the political geography of 13th and 14th century Thomond, as well as the *modi operandi* of war, diplomacy, and economic management carried out by Irish and English polities of the period. I ended each chapter synthesizing these ideas as a conceptual model to be later implemented as a computerized simulation (ThomondSim) and scientific discovery board game (*The Triumphs of Turlough*). The purpose of this chapter is to discuss how this implementation process took place, how I used both ThomondSim and *The Triumphs of Turlough* to conduct tests and experiments to answer this thesis' main research questions, what results I obtained, and what do they say about the wars in Thomond and the 1310s event.

4.1. Verification and validation

In developing any kind of computerized model, writing the code is only the first step. Programming languages, like all formal languages, have very high logical requirements. The problem will execute exactly what has been written in the code, regardless of whether it matches or not the ideas in our heads. This, in fact, is one of the main benefits of using formal models as a complement to traditional historical research. They work as an “logic police”⁷⁵⁷, forcing us to confront the vagueness in our assumptions and the gaps in our knowledge. However, this rigidity also means that we must be very thorough when testing the code, lest we end up with a model that does not work, or work in a way that diverges from what we intended it to represent.

757 O'NEILL, Barry, Game Models of Peace and War: Some Recent Themes, *in*: AVENHAUS, Rudolf; ZARTMAN, I. William (Orgs.), **Diplomacy Games: Formal Models and International Negotiations**, Berlin, Heidelberg: Springer, 2007, p. 31.

The first steps in ensuring a computer model is working properly are called verification and validation. Verification is a sequence of tests to ensure the code is operating as it should – i.e. that there are no bugs, and that its procedures are following the logic outlined in the pseudocode.⁷⁵⁸ Validation, on the other hand, are the steps required to demonstrate that the resulting model is scientific ‘valid’ – i.e. that it matches our knowledge of historical reality.

There is no single formula for verifying and validating a model – nor a well-established line after which a model can be considered 100% verified and valid. As Niki Popper and Phillip Pichler argue, reproducibility, validity, and falsifiability are better regarded as *properties* worked upon throughout the study, rather than tasks to be completed.⁷⁵⁹

Building on guidelines by Robert Sargent⁷⁶⁰, Popper and Pichler break down verification and validation in four distinctive categories. The first, *conceptual model validation*, concerns the validity of the underlying explanation model. The second, *computerized model verification*, encompasses the measures taken to ensure the code is running properly. The third, *operational validation*, consists in evaluating whether the model’s parameters have been chosen correctly, in a way that its outputs are plausible. Finally, *data validation* is the test of the accuracy, appropriateness, and sufficiency of the data we use to build the model.

These processes were conceived for computer simulations, but their underlying principles are equally applicable to analog models such as *The Triumphs of Turlough*. Although seldomly crafted for the purposes of research, videogames and board games also require comprehensive procedures for ensuring proper development and implementation. These methodologies are usually examples of what Katie Salen and Eric Zimmerman call iterative design, a “play-based design process” according to which a team starts from a very basic prototype, then add, evaluate, and experiment rules and mechanics through the course of several playthroughs.⁷⁶¹ In this project, I have used

758 A description written in natural language, but in a way that emulates the syntax of a programming language.

759 POPPER, Niki; PICHLER, Phillip, Reproducibility, *in*: WURZER, Gabriel; KOWARIK, Kerstin; RESCHREITER, Hans (Orgs.), **Agent-based Modeling and Simulation in Archaeology**, Cham, Heidelberg, New York, Dordrecht, London: Springer, 2015, p. 96.

760 SARGENT, Robert, Verification and validation of simulation models, *in*: Johansson, S.; Montoya-Torres, J.; HUGAN, J.; YÜCESAN, E. (Orgs.). **Proceedings of the 2010 Winter Simulation Conference**. Baltimore, 2011, p. 183.

761 SALEN; ZIMMERMAN; TEKINBA, **Rules of Play**. Kindle Edition|: Loc.

computer-related methods for verifying and validating ThomondSim and iterative design techniques for testing *The Triumphs of Turlough*. Because both models share the same parameters, I was often able to gather insights from one to modify, correct, and improve the other.

Due to the very nature of iterative game design, modeling and validation work on *The Triumphs of Turlough* started prior to the development of ThomondSim. Salen and Zimmerman recommend that playtesting of a prototype should begin very early, “at the absolute latest, 20 percent in the way into a project schedule.”⁷⁶² While not quite meeting their mark, I started elaborating the first version of the board game in September 2019, while still carrying out the research that resulted in Chapter 3 of this thesis. The outbreak of the Covid-19 pandemic delayed the first playtest, which eventually took place online on July 18th 2020 via the virtual platform Tabletop Simulator. The last test carried out by the development team happened in April 10th 2021. On May 25th of the same year, a last playtesting session was held with the participation of members of Laboratório de Estudos Medievais – Núcleo USP.

The development of ThomondSim, on the other hand, started in January 2021, when the historical work behind Chapters 2 and 3 had been completed, the conceptual model was already concluded and the mechanics of *The Triumphs of Turlough* had already been polished to a great extent.

Conceptual model validation

Historians are well acquainted with model validation, even if the term itself seldom appears in the discipline’s lexicon. Sargent claims conceptual validity is achieved when “(1) the theories and assumptions underlying the conceptual model are correct and (2) the model’s representation of the problem entity”, underlying logic, and causal relationships are “reasonable”.⁷⁶³ In historical monographs, this is the time-tested role of narrative itself. Theoretical assumptions and causal hypotheses are confronted with evidence taken from the sources and claims from existing works of historiography. In this project, the bulk of my conceptual validation was done in the work leading to

⁷⁶² *Ibid.*, Chapter 2: The Design Process, paras 3-4.

⁷⁶³ SARGENT, Verification and validation of simulation models, p. 188.

Chapters 2 and 3, in which I also justified my criteria for abstractions, simplifications, and omissions.

Still, the model has some important shortcomings that likely cannot be fixed without redesigning it from the ground up or potentially collecting more data. In the absence of any short-term solutions, all I can offer is transparency and my hope that they do not fundamentally invalidate the model's validity:

Hazards: the hazard events in the model are an attempt to represent, in general lines, the effects of each type of documented extreme event associated with the 1310s event (e.g. incidence of heavy rainfall will decrease the integrity of all settlements, illustrating the effects of harsh weather on crops and property.) They also carry general assumptions about the causal links between each hazard (e.g. heavy rainfall increases the likelihood of liver fluke disease, a condition caused by the ingestion of platyhelminths by cattle grazing on flooded grassland). However, neither the frequency or magnitude of these hazards is based on data – and, given the terse nature of the Irish annals, I am unsure historical data of that level of specificity even exists. It is possible that environmental historians, whose familiarity with the subject greatly surpasses my own, may find both my choice of parameters and its outputs to be incorrect to the point of compromising its explanatory value. I did my best to account for this deficiency incorporating sliders for most disaster effects in ThomondSim's interface (Fig. 36). Like all board games, *The Triumphs of Turlough* is yet more open to modification, allowing potential player-historians to make their own rules and even add in different disasters. While I lack the required knowledge to fully explore these possibilities, I invite experts to do so, challenging the results of the experiments in this thesis, if needed be. If either ThomondSim or *The Triumphs of Turlough* end up contributing to a new hypothesis about the effects of the 1310s event in Ireland, even if it differs from my own, I will consider my task a success.

Hazards settings

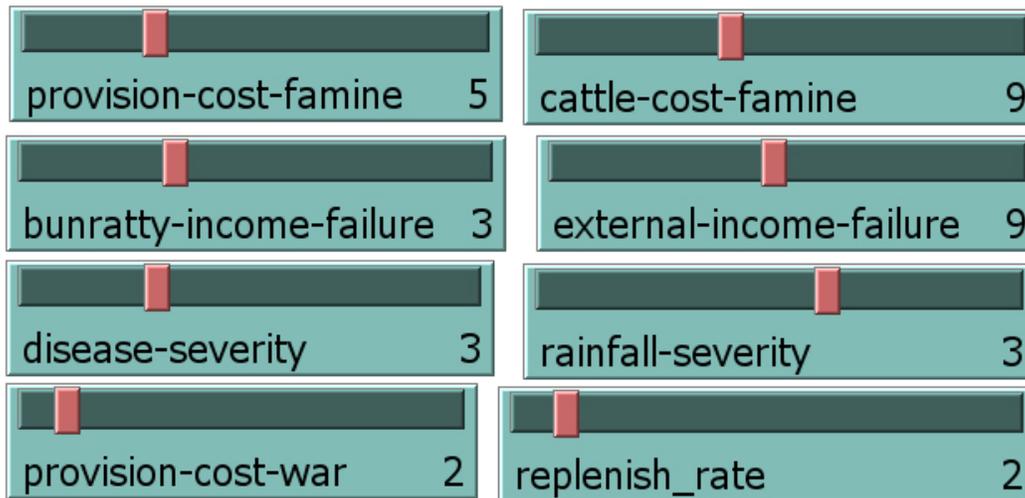


Figure 36: Hazard-related sliders in ThomondSim's interface

Movement: ThomondSim's `move` and `choose-target` procedures, commands that dictate how an agent navigates the environment and selects a destination, respectively, present some notable modeling issues. As I explained in Chapter 2.6., above, ThomondSim runs on a network environment in which agents move around by calculating a path of least cost. This is done by two procedures added by NetLogo's NW extension:, `nw: weighted-distance-to` and `nw: turtles-on-weighted-path-to`. While this solution is streamlined and efficient, my algorithm takes in account the difficulty of routes (represented by a link attribute called `difficulty`), but not the subjective motives that made a node more or less attractive to agents. In reality, marauding armies would sometimes take longer detours to maximize the effects of raids, avoid areas where an enemy force was believed to lurk or avoid enemy fortifications. In ThomondSim, on the other hand, they will always choose the shortest route – although they can and will switch targets if they feel outnumbered (i.e. low `army-strength`, running out of `provisions`, or if an ally requires their aid in battle). With the exception of the latter case, however, they will

almost always act as if their awareness of their environment is restricted to the node they are currently on.

Castles: The limitation in awareness mentioned about is especially problematic for the representation of castles. Military fortifications played an important role in the defense of the English lordship of Ireland. In ThomondSim, I have tried my best to account for their impact on the landscape. Castles impose a number of penalties on enemy armies who intrude upon their zones of control. Passing through a node occupying by an enemy castle takes its toll on an agent's `provision` and `cattle` attributes. Raiding a castle requires making an attack roll against the garrison. If it fails, the attacking army will lose `army-strength` and potentially scatter. Finally, castles provide a bonus to the `defender-modifier` attribute of the node it is in every time an enemy attempts to raid or initiate combat within its zone of control. In reality, the danger of facing a castle was severe enough to encourage armies to avoid castles altogether, or only approach them with overwhelming force in the intent of besieging and razing them. In ThomondSim, agents may occasionally blunder upon castles, suffering attrition and potentially losing their armies in the process. This may cause castles to have an even greater impact on the course of a campaign than their historical counterparts.

Computerized model verification

There are two kinds of issues model verification is designed to identify and remedy: syntax and logic mistakes.

Syntax mistakes are errors in the way the code is written, which may cause the model itself to crash or refuse to run. The sample procedure below, for example:

```
To setup-capital
  Ifelse breed = english
  [
    set capital one-of castles-here
  ]
end
```

will turn out an error, because `ifelse` is a primitive⁷⁶⁴ that requires instructions within a command block to be followed when a conditional statement is met and an alternative command block for when it isn't: **if** the agent is English, its capital will be a castle. **Else**, the capital will be a different kind of settlement. Thus, for the code to run properly, we must either write an “else” statement:

```
To setup-capital
  ifelse breed = english
  [
    set capital one-of castles-here
  ]
  [
    set capital one-of longphoirt-here
  ]
end
```

Or, at the very least, leave an empty command block:

```
To setup-capital
  ifelse breed = english
  [
    set capital one-of castles-here
  ]
  [
  ]
end
```

in which case the `ifelse` simply becomes a wordier version of `if`, a similar primitive that executes a command if a condition is met, but does nothing if it doesn't.

Logic mistakes, on the other hand, are errors in the underlying assumptions behind the code. They will not prevent the simulation from running, but will generate outputs that contradict our assumptions – and sometimes, even common sense.

⁷⁶⁴ Primitives are ready-made procedures that are part of the basic lexicon of a programming language.

Take, for example, the following statement: outbreaks of liver fluke disease will reduce the cattle herds of all agents affected by it. If I simply write it in code as is:

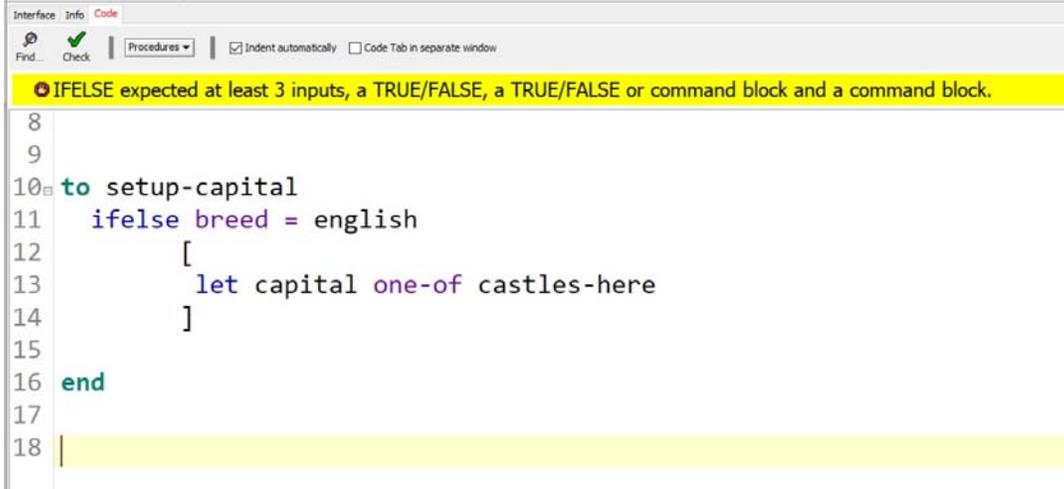
```
To inflict-disaster
  if active-disaster = liver-fluke-disease
    [
      ask turtles
        [
          Set cattle cattle - 1
        ]
    ]
end
```

but fail to stipulate that some agents may have no remaining cattle by the time they are hit by a disaster, this code will cause some agents to have a negative quantity of cattle. To prevent this from happening, I must include a conditional clause that checks if the agent still has cattle to lose before suffering the disaster effects:

```
To inflict-disaster
  if active-disaster = liver-fluke-disease
    [
      ask turtles
        [
          if cattle > 0
            [
              Set cattle cattle - 1
            ]
        ]
    ]
end
```

NetLogo comes with an in-built debugger that not only identifies syntax mistakes, but also the exact line in the code where the problem is happening. (Fig. 37).

Logic mistakes, however, are harder to spot, and become harder still the more complex the model gets, as each new addition to the code might affect the operation of procedures already written.



The screenshot shows the NetLogo interface with the 'Code' tab selected. A yellow error message banner at the top reads: 'IFELSE expected at least 3 inputs, a TRUE/FALSE, a TRUE/FALSE or command block and a command block.' Below the banner, a code editor displays the following procedure:

```
8  
9  
10 to setup-capital  
11   ifelse breed = english  
12     [  
13       let capital one-of castles-here  
14     ]  
15  
16 end  
17  
18
```

Figure 37: NetLogo’s built-in debugger flagging a syntax mistake

To verify ThomondSim, I have written and tested each procedure one at a time, only moving on to the next when the previous one seemed to be working as intended. In the case of procedures with multiple sub-procedures or very complex conditional chains, I made use of a NetLogo primitive called `show` to ask the model to print some output text after executing each command. `Show`, like its related procedures `print` and `write`, displays the information called for as an output text in a section of the interface called the command center, allowing the model’s user to immediately see what part of the procedure the agent is currently executing and whether its output values are within the realm of possibility.

The `inspect` primitive is another valuable tool for identifying logic mistakes. This command opens up an agent monitor that allows the user to zoom-in on an agent, watch its movements, and check-out the values for each of its attributes. Inspecting agents is useful to assess if changes in state are happening as intended – e.g. if a agent who joins the civil war correctly changes its `loyalty` attribute accordingly –, if agents are adequately responding to key value thresholds – e.g. if, on reaching `army-`

`strength` of 0, they demobilize –, if the variables are changing within the ranges we stipulated – e.g., if a settlement’s `integrity` never drops below 0 and never exceeds its maximum value (10) –, and, in the case link-related procedures, if the agents are pairing up with the right targets. In verifying ThomondSim, I used `show` statements to identify which was the last procedure executed before triggering a bug, and which agent(s) were involved in it, then the inspect monitor to check its attributes. Sometimes, this required manually setting the variables to the values they were expected to have prior to carrying out a procedure and re-executing it to see if the problem persisted. Even when no bugs were being triggered, I used inspect monitors to see if variations in attribute value were occurring as normal for one or more particular agent.

The `move` procedure was by far the hardest command to verify, due in no small part to the fact that it was built upon a ready-made solution: the `nw:weighted-distance-to` and `nw:turtles-on-weighted-path-to` from NetLogo’s network extension.⁷⁶⁵ To implement it correctly, I first built a prototype model with a single agent. Once I made sure the agents were interacting with the network as intended, I added in `move-points` and `move-cost` and a place-holder procedure for choosing targets once a destination was reached. Subsequently, I added several different agents moving at the same time. Finally, I looped the procedure so that agents would keep executing the command until their `move-points` were depleted, they engaged in combat or the simulation reached its end condition. Because the `move` procedure encapsulates many others – agents raid, initiate combat, mobilize allies and oust pretenders during the course of its loop – I had to continually rewrite and debug it every time I expanded the model. The `show` primitive proved invaluable for this task, allowing me to pinpoint which agents were triggering bugs, which turtles they were targeting, and whether their `move-points` were spent correctly.

Ultimately, however, the simplest verification tool is the interface’s view itself: some bugs can be quickly identified simply by watching the simulation and spotting behavioural issues. To avoid polluting the screen with more information that I could keep track of, I would constantly toggle visibility of elements depending on which part of the system I was currently working on. I also implemented visual cues to mark certain changes in agent state. For example, *ríthe* and magnates will switch to an arrow-

⁷⁶⁵ See Chapter 2.6., above, for more on how these procedures work.

shaped icon when mobilizing, allowing the model's user to see if military mobilization happened as intended. Likewise, settlements will shrink or expand depending on their current `integrity`. While observational tests of this sort are arguably the most informal and subjective means of judging a simulation, they are of paramount importance for ThomondSim's intended target audience – historians – who are generally not equipped to (or interested in) scrutinizing lines of code or conducting statistical tests. For that reason, I have developed ThomondSim to be as visual-friendly as possible, with a view that occupies most of the interface space and several data monitors. (Fig 38)

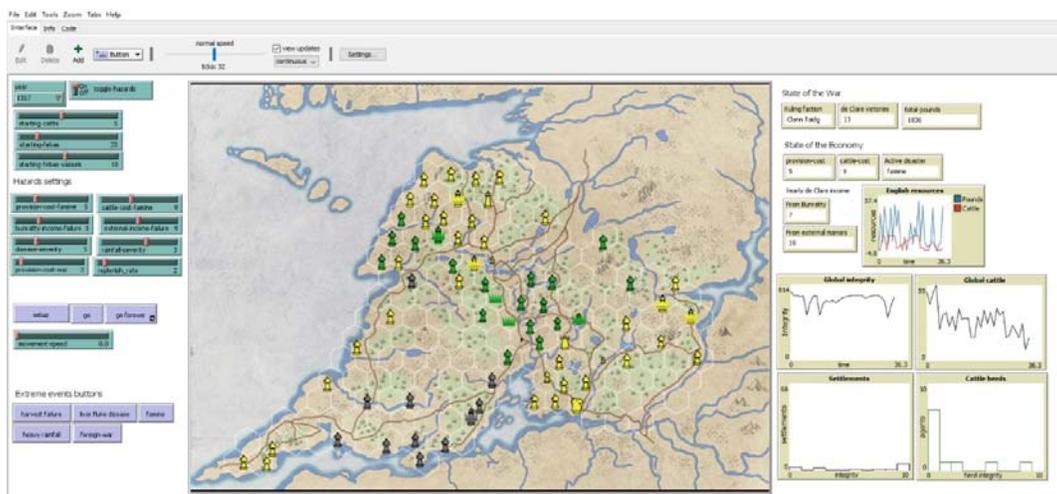


Figure 38: ThomondSim's interface, with view (center) and data monitors (right)

Unfortunately, no researcher can be thorough enough to fix every single bug in their model. As ABM manuals never cease to reiterate, verification is ideally carried out by a team of researchers, so that every line of code passes through different pairs of eyes.⁷⁶⁶ Due to the time and human resources constraints of this project, however, I had to verify the implemented model entirely by myself. As a result, I was unable to ascertain the cause behind some bugs. One singularly pernicious issue would prompt an agent to infinitely repeat the looped commands within the `move` procedure. The problem was infrequent enough to hardly ever get triggered when using the model, but

⁷⁶⁶ ROMANOWSKA; WREN; CRABTREE, *Agent-Based Modeling for Archaeology*, p. 307.

would inevitably be brought about in at least one of the hundreds of iterations necessary to run an experiment.

Usually, bugs are not research-breaking issues, because NetLogo's integrated experiment-making tool – BehaviorSpace – is programmed to keep executing the model regardless of runtime errors. By creating a specific output reporter that flags which simulation runs were interrupted, it is possible to subsequently discard the data obtained from said runs and – provided they are not very numerous. Yet, because ThomondSim's infinite loop bug never actually resulted in a runtime error, it would inevitably compromise the experiment, causing one of the runs to simply last forever.

After some failed attempts at solving the issue, I decided to create a local variable called `while-duration` that measured the number of times the `move` loop was executed by a single agent (`while` being the name of the procedure that creates the loop). If `while-duration` reached 100, the model was to execute the commands `let zero 0 print 1 / zero`, which prompts a runtime error due to an impossible arithmetic operation (division by zero).

Operational validation

Most of the operational validation work of the model was carried out as part of the *The Triumphs of Turlough* playtesting sessions, which, as explained above, preceded the development of ThomondSim. The board game proved to be an invaluable tool for testing parameters and uncovering “blind spots” that had not been addressed by the rules. The testing methodology alternated between playing through a match until an issue was identified and “playing against the grain”, in which testers deliberately made disadvantageous and/or erratic moves to see what outcomes were reached in extreme situations.

Value ranges for `integrity`, `cattle`, `febas` and `army-strength` were set at 1-10 because they produced sufficiently valid outcomes and exhibited, to paraphrase Michael Agar, adequate “room to roam”.⁷⁶⁷ They were neither too sensitive nor unresponsive to player input. Furthermore, in the case of `army-strength`, the

⁷⁶⁷ AGAR, Michael, My Kingdom for a Function: Modeling Misadventures of the Innumerate, *Journal of Artificial Societies and Social Simulation*, v. 6, n. 3, 2003. 4.17.

parameter was easy to correlate with available historical data. As shown in Chapter 3, most of the armies in late-medieval Ireland ranged from a few hundred to a thousand men. The 1-10 range, therefore, provided an accurate representation of military mobilization on a scale of 1:100 soldiers.

When issues with the game hinted at problems that went beyond the choice of parameters, the development team would suggest new rules to circumvent the problem. In one notable case, *The Triumphs of Turlough* helped us identify an underlying problem in the conceptual model itself. During initial test runs, campaigns would invariably result in a pitched battle involving all factions in the map. This outcome belied all available evidence of military activity in medieval Ireland, in which parties lacked the strength to face enemies head-on and thus made extensive use of battle-denying tactics such as *chevauchées*. To figure out what was missing from the model, I re-analysed historical descriptions of marches and campaigns and realized I had not taken in account the speed of communication. As both the Irish annals and the CT attest, *tuatha* were prone to surprise attacks, and *ríthe* were often unaware of an ongoing war before an ally or overlord personally travelled to their holdings asking for soldiers. In *The Triumphs of Turlough* prototype, on the other hand, all agents mobilized at the same time, causing any invasion to be met by well-prepared defending forces – and, invariably, end up defeated.

To fix the issue, I re-elaborated the mobilization sub-model from scratch, eventually arriving at the solution described in Chapter 3. I then incorporated this revised model into ThomondSim, creating a procedure called mobilize and breaking it down into three separate sub-procedures – `mobilize-at-first-go`, `mobilize-at-round-start`, (both dictating the mobilization rules for the invading agent) and `mobilize-during-round`, (dealing with all the other agents). Agents choose which command to execute based on the value of two global variables, `campaign-progress` and `news-of-the-war`. A fourth procedure, `mobilize-other`, is part of the `move` procedure and deals with a situation in which an agent is explicitly told to mobilize by an ally or overlord seeking help.

Given the analog nature of *The Triumphs of Turlough*, this was remarkably easy to do, as alternative sub models could be conceived of, tested and calibrated during the course of a single playtesting session. However, some parameters required more rigorous testing than the game was able to provide. The validity of the combat equation

was one such case. Playtesting sessions suggested that the formula used to determine the outcome of battles was unreasonably biased towards the defender. However, due to the slow pacing of the board game, in which calculations must be done by hand, the tests did not generate enough data to confirm or deny the suspicion. To evaluate the situation, I created two reporters in ThomondSim called `attacker-wins` and `defender-wins` that measured the number of battles won by the attacking or defending coalitions, respectively. I then created an experiment, measuring the proportion of wins over several iterations. The test confirmed the impressions of the beta players, showing that over 2/3s of iterations of the `fight` procedure was decided in favour of the defender.

Determining whether this discrepancy reveals a bias in the system or simply the expression of a feature of medieval warfare is tricky, because data about battles in late 13th – early 14th centuries Ireland is sparse, vague or, in many cases, simply missing. It is telling that only a single account survives of the battle of Dysert O’Dea, the most famous military engagement of the wars of 1276-1318. In the absence of accurate information, I considered the model valid if battles were reliably won by attackers who greatly outnumbered their enemies – one scenario which historical sources unequivocally attest to have been a foregone conclusion. After a few adjustments in the formula, I arrived at the equation presented in Chapter 3.

Calibrating parameters related to the extreme events, on the other hand, had to be done exclusively in ThomondSim. The reason for this is that matches in *The Triumphs of Turlough* hardly ever lasted more than a few rounds, precluding analyses of the long-term effects of environmental and economic phenomena. Validating these parameters was also problematic from an epistemic standpoint, as they were not always substantiated in evidence. Arguing that an abnormally wet weather increases the likelihood of outbreaks of liver fluke disease is simple enough; indicating *how much* more likely these outbreaks become is little more than guesswork. To arrive at reasonably credible values, I undertook an uncertainty analysis. This test consists in running the model with a range of plausible values for parameters we lack data for, in order to see whether (and to what extent) these variations affect the outcomes. If the model proves to be robust – i.e., if it performs similarly regardless of parameter values – then the uncertainty is not a significant issue. If it does not, the parameters need to be better understood or accounted for, if not redesigned altogether. In the worst case

scenario, a modeler can be accused of calibrating such parameters to “paint the target around the arrow” and forcing a convenient conclusion.

ThomondSim’s uncertainty analysis examined its robustness regarding the parameters `provision-cost-famine`, `cattle-cost-famine` (that determine the severity of famines), `Bunratty-income-failure`, `external-income-failure` (that rule the intensity of harvest failures), `disease-severity`, `rainfall-severity`, `provision-cost-war` (a measure of price rises during wartime), as well as `replenish-rate` (a measure of the resilience of settlements). I also created three additional variables – `dis-deck`, `famine-deck`, and `failure-deck` – to find out if the distribution of hazards within a “disaster deck” adversely affected the simulation.

In the absence of accurate historical and paleoclimatic evidence with which to compare these outcomes, I chose values that had a significant effect on the course of the simulation, but were not enough, in themselves, to provoke an unmitigated disaster. After some experimentation, I arrived at the values discriminated in Table 9 below. Because this process relied on a great deal of guesswork, I also incorporated all of these parameters as sliders in ThomondSim’s interface to allow other researchers to try out their own combinations.

Parameter	Value
<code>provision-cost-famine</code>	5
<code>cattle-cost-famine</code>	9
<code>Bunratty-income-failure</code>	3
<code>external-income-failure</code>	9
<code>disease-severity</code>	3
<code>rainfall-severity</code>	3
<code>provision-cost-war</code>	2
<code>replenish-rate</code>	2

Table 9: Values for ThomondSim’s hazard settings

Data validation

As Sargent wisely admonished, “data problems”, not logic mistakes or computational limitations, “are often the reason that attempts to validate a model fail.”⁷⁶⁸ The wary relationship between the historical discipline and formal modeling is a testament to that affirmation. To historians, who spend a great deal of time identifying discourse biases, tracing the manuscript transmission of records and carefully mapping the semantic fields of important terms, attempts to extrapolate that data and transform it into numbers are duly regarded with suspicion. Indeed, many historical monographs are, at their cores, works entirely dedicated to data validation.

While I have done my best to account for the biases, omissions, unreliability in my own sources, it was not the goal of this project to scrutinize the manuscript witnesses and material evidence of the documents, artifacts and sites cited in this thesis with the level of attention required to re-evaluate current theories of authorship and context of production. Instead, I have whenever possible relied on the data validation work carried out by other scholars.⁷⁶⁹

Divergences between ThomondSim and *The Triumphs of Turlough*

In addition to ensuring that both ThomondSim and *The Triumphs of Turlough* were individually validated, it was vital to the project that both models were valid *in relation to each other* – i.e., that any changes in one’s governing rules would immediately be replicated in the other, and that their outcomes were identical, or as close to it as possible.

Yet, due to the very differences in their natures and intended purposes, achieving a 100% equivalence between ABM and board game was impossible. Above all, the fact that *The Triumphs of Turlough* was designed as a citizen science project, and not merely a wargame, meant that both its rules and presentation had to be accessible and player friendly. In other words, it was not enough to design a scholarly valid game, but one that faithfully respected the underlying historical model and was also *fun*.

768 SARGENT, Verification and validation of simulation models, p. 188.

769 Cf. for example, WESTROPP, On the External Evidences Bearing on the Historic Character of the “Wars of Torlough,” by John, Son of Rory Mac Grath; MCINERNEY, Luke, Was Caithréim Thoirdhealbhagh written at Clare Abbey in the mid-fourteenth century?, **The Other Clare**, v. 45, p. 26–32, 2021.

While these discrepancies do not undermine the scientific validity of either model, they must be taken in account before using insights obtained from one to improve or modify the other:

Complexity of calculations and match length: Unsurprisingly, the first crucial difference between the ABM and the board game is the speed of calculations in each. A computer can carry out an entire simulation run, from setup to the end of the war, in the space of a few seconds. Humans, on the other hand, must execute each step manually. Even after simplifying the calculations so that they could be performed in one's head – e.g. using standard six-sided dice to determine probability or privileging integers over fractions – *The Triumphs of Turlough* playtesters were taking hours to achieve outputs ThomondSim generated almost instantaneously. To make the game more accessible while still preserving the complexity of the original model, I made changes to the game's victory conditions so that matches were resolved in a shorter number of rounds. In *The Triumphs of Turlough*, as in ThomondSim, the simulation automatically ends once one of the pretenders runs out of *febas*. However, unlike the ABM, agents start with a much smaller *febas* pool – after extensive playtesting, 3 proved to be the optimal number. As an additional measure to prevent matches from dragging for too long, the game will also end if one of the players amass 10 *febas* points. Because these rules prevent matches to continue past a few rounds, it precludes the kind of long-term analysis made possible by running experiments with the ABM.

Availability of information: Agents in ThomondSim are, at the same time, all too aware and not aware enough of their surroundings. Because neither the `choose-target` or the `move` procedure take in account circumstantial dangers like the presence of enemy agents, *ríthe* and magnates are subject to a persistent fog of war. To all intents and purposes, their “vision” is confined to a single node in the network-environment. This is somewhat historically valid, as written accounts of medieval expeditions do show that armies were often surprised by ambushes and unforeseen dangers. However, it also makes agents unaware of landscape features such as castles, dangerous river crossings and peat mires. *The Triumphs of Turlough* suffers from the opposite problem because there is no fog of war of any kind, and players are always informed of each other's movement. Unless the rules are changed to incorporate a referee, or the game is adapted into a multiplayer videogame, this is not a problem that

can be solved, as complete and perfect information is an intrinsic characteristic of board games.

Agency of the pretender in the expedition phase: As explained in Chapter 3, Irish pretenders usually marched alongside their English allies when invading Thomond. In *The Triumphs of Turlough*, both magnate and pretender are represented as distinctive agents. When the player controlling the magnate attacks the king of Thomond at Clonroad, the pretender army immediately mobilizes under the control of a second player.

This mechanic is necessary to ensure that all players participate in each expedition phase. A game in which a player simply waited while his character's English ally did all the work, while historically accurate to a certain extent, would fail every criterion of good game design.

Reproducing this rule in ThomondSim, however, often created a feedback loop in which a mobilized pretender would immediately run alone into danger and be defeated in combat, making his coalition lose the campaign even when it had the tactical upper hand. The bug was more frequent the more devastated the environment was. With no remaining **integrity** with which to recruit via *coyne & livery*⁷⁷⁰, and meagre cattle reserves to serve as provisions, pretenders would sometimes fail an expedition by sampling moving around and ending their turn outside a settlement. To prevent this behaviour, pretenders in Thomond only enter the map *after* their rival has been exiled and the campaign is finished.

Formality: A board game is not a formal system. Unlike agents in a computer simulation, players are prone to misinterpret rules, commit mistakes, or even openly challenge the instructions, inventing “house rules” of their own to make the game more fun or historically accurate. As touched upon in Chapter 1, far from a disadvantage, this feature is arguably the greatest asset a game has to offer.

For practical purposes, therefore, it might be useful to think about *The Triumphs of Turlough* as a version of ThomondSim with more transparency and added functionalities, including a higher – and potentially infinite – degree of agency for magnates and *riithe*.

4.2. Experiment design

⁷⁷⁰ See Chapter 3, above

Sections 2.6. and 3.6. of this thesis dealt with the process of building a conceptual model based on historical arguments. Section 4.1., above, described how I implemented and validated this model. The purpose of this section is to explain how I used the resulting ABM to generate data with which to answer my main research question: *Did the environmental and economic extreme events of the late 13th – early 14th centuries had an impact on the political events in Thomond?*

As I explained at length in Chapter 1, ABM is an “in silico” research technique that consists in running virtual experiments that are similar, in design, to those in the biological sciences.

For this thesis, I used BehaviorSpace (Fig 39), NetLogo’s built-in experimentation tool, to run ThomondSim hundreds of times and collect data on certain output reporters, based on four different scenarii – i.e. a combination of initial parameters – outlined below. BehaviorSpace exports the resulting data as a .csv file, which I then analysed using the programming environment R.

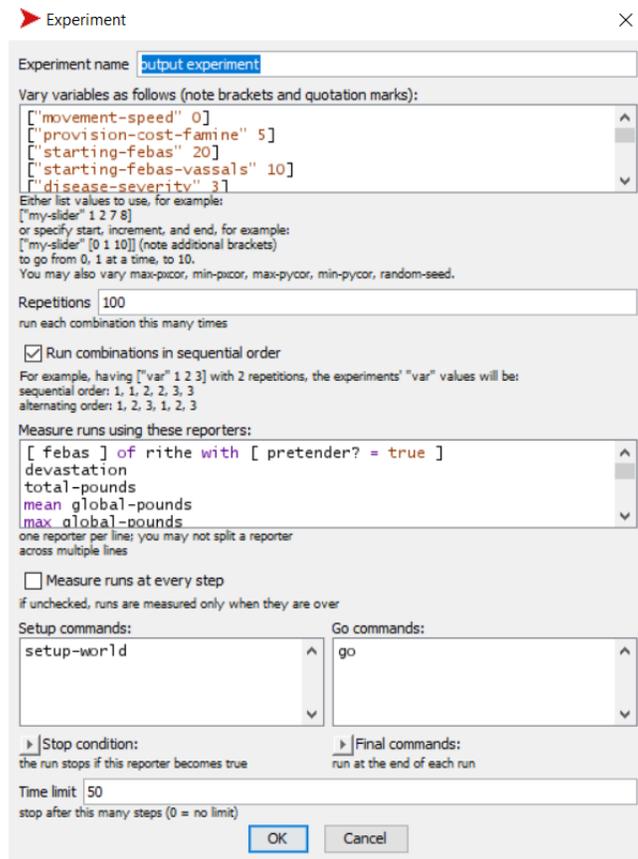


Figure 39: NetLogo's BehaviorSpace pane. The top window, below the experiment name, shows the initial parameters. The middle scrollable window shows the output reporters. Other tools allow the researcher to stipulate run duration, time limit, stop conditions, and whether data should be collected at the end of the run or after each tick.

Scenarii

The experiment counted with four scenarii (Table 10) based on two parameters: `toggle-hazards`, and `year`.

Scenario	1	2	3	4
----------	---	---	---	---

<code>toggle-hazards</code>	True	False	True	False
<code>year</code>	1276	1276	1317	1317

Table 10: Experiment scenarii

`toggle-hazards` is a categorical variable that determines whether extreme events occur or not. When set to `true`, it runs the procedures related to ThomondSim’s economic-environmental sub-model, as it was outlined in section 3.6. When set to `false`, it skips these commands, generating a contrafactual scenario in which no abnormal weather, harvest failure, famine, cattle murrain, or war-induced inflation ever happened.

Because ThomondSim assigns different disaster decks to different starting dates – reflecting the worsening environmental and economic conditions of the early 14th century – the experiment should ideally account for every possible `year` state (1276, 1277, 1281, 1284, 1315, 1317, and 1318). However, exploring these parameters to the fullest of would result in 14 different scenarii. If each of them was run 100 times, the total data to be analyzed would amount to an n of 1400, each with over 10 different observations to be analyzed. Thus, to prevent the experiment from spiraling out of control, I decided to use only two configurations for `year`: 1276 and 1317. Although they do not account for every possible consequence of the model, their disaster decks include different types of extreme events that might have affected Thomond in contrasting ways. 1276 features recurring heavy rainfall episodes, which should place a heavier burden on settlement `integrity` and `cattle` of Irish agents; 1317 counts with less rainfall events, but more harvest failures and famines that may disproportionately affect English finances and recruiting capabilities.

All other parameters of the model were kept the same throughout in the experiments.

Each scenario was run 100 times, to a total n of 400.

Output reporters

Output reporters are the measurements taken after each run. For this experiment, they can be divided into two groups: those that account for effects in the economy, and those that track changes in the political landscape.

The first group includes the following indicators:

final-integrity: measures the sum of the **integrity** of all settlements by the end of the run. The highest possible value for this reporter is 730, as there are a total of 73 settlements in the model.

devastation: sum of the total amount of damage to **integrity** suffered by settlements from all sources throughout the run. Comparing it with **final-integrity** provides a measure of the resilience of the environment. If both reporters are high, it means the settlements managed to replenish most of the damage suffered.

mean global-cattle: mean of the sum of **cattle** owned by each agent (*riithe* and magnates) at each step of the simulation. Measures the effect of warfare and extreme events on the cattle population. I have chosen to analyse the mean rather than the final sum because, like **integrity**, **cattle** replenishes with time, and gross outputs are not reliable indicators of the damage the population might have suffered throughout the run.

total-pounds: total amount of **pounds** ever obtained by a magnate in a run, regardless of whether or how it was spent.

mean global-pounds: mean of **pounds** owned by a magnate at each step of the simulation.

max global-pounds: maximum value of **pounds** obtained by a magnate during the simulation. Like the indicator above, it provides insight on the magnate's capacity to keep a financial reserve. Values above 25 (the total English predicted income in years without disasters) indicate a surplus; the higher the value, the larger the reserve.

To measure changes in the political landscape, I created the following output reporters:

ruling-faction: Name of the faction (Clann Taidhg or Clann Briain Ruaid) left standing at the end of the war

`CTg-wins`: number of expeditions won by Clann Taidhg

`CBR-wins`: number of expeditions won by Clann Briain Ruaid

`years-under-english-rule`: number of expeditions won by a faction allied to the English (usually Clann Briain Ruaid, but sometimes Clann Taidhg, as the de Clares start the 1317 scenario unaligned.)

Duration

Determining the right duration for each run of the experiment poses a complicated epistemic issue. On the one hand, the simulation needs to go through enough ticks so that long-term economic effects can be properly observed. On the other hand, the longer the run, the less historically valid its outcome becomes. As I discussed above in Chapter 3, ThomondSim does not account for the complexities of medieval diplomacy. The ABM effectively assumes that the political divisions and network of loyalties of its initial parameters will remain static for as long as the run lasts – even if, in the time scale of the model, it goes on for centuries.

ThomondSim's duration is dependent on the `febas` ratings for Clann Taidhg and Clann Briain Ruaid. Once either of them reaches zero, the run ends. In *The Triumphs of Turlough*, this attribute was kept deliberately low (3) to prevent matches from lasting more than a few hours. This choice had the added benefit of masking the discrepancy in time scale between the model's economic and political systems, at the expense of preventing players from observing long-term processes of degradation and recovery. After some informal experimentation, I stipulated a starting `febas` of 20 to ThomondSim, which roughly corresponds to an average run duration of 30 ticks. This length was long enough to allow variations in the output variables to fall into discernible patterns, although I did not attempt a statistical analysis to determine if this duration is truly optimal.⁷⁷¹ Furthermore, I set up BehaviorSpace to end any run after its 50th tick. I included the safeguard to prevent a possible (although infrequent) situation in

⁷⁷¹ Ten Broeke et al. suggest calculating the coefficient of variation (standard deviation / mean) of the outputs to see if their variance has been adequately captured. TEN BROEKE, Guus; VAN VOORN, George; LIGTENBERG, Arend, Which Sensitivity Analysis Method Should I Use for My Agent-Based Model?, *Journal of Artificial Societies and Social Simulation*, v. 19, n. 1, p. 5, 2016. Unfortunately, I did not have time to carry out this procedure.

which the war would devolve into a perpetual “tie-breaker”, with neither pretender winning enough consecutive campaigns to fully deplete their opponent’s `febas`.

Increasing the `febas` from 3 to 20 had the collateral effect of making the political landscape more rigidly defined. Whereas a pretender running out of `febas` points causes the simulation to stop, no such thing happens when a vassal *rí* does so. Instead, that Irish agent restores its `febas` to its initial values and switches alliances, representing the fallout of an internal power struggle. With a high enough initial `febas` value, these diplomatic changes would hardly ever occur. To remedy this situation somewhat, I created a separate slider for the initial `febas` of non-pretender *ríthe* – `starting-febas-vassal`, and set it at half (10) the value for the heads of Clann Taidhg and Clann Briain Ruaid.

4.3. Results

The experiment revealed that the chosen scenarii disproportionately favour Clann Taidhg. Of the 400 runs executed on BehaviorSpace, Clann Briain Ruaid was the faction left standing in just 34 – or 8,5% of the total. Clann Taidhg also won more expeditions in all four scenarii, although the advantage is more pronounced in the 1317 experiments (Table 11). These outcomes cannot be attributed to decision-making limitations. Playtests of *The Triumphs of Turlough* arrive at comparable results, even though its players employed far more complex and varied strategies than the ones included in ThomondSim, not to mention the benefit of unrestricted communication and of the possibility of learning from their mistakes, which the agents in the model lack. Interestingly, factions sometimes lost the war even though they won more campaigns throughout the run. This outcome merits further investigation, but is likely related to the way `febas` is calculated in the conceptual model. Losing a campaign by fleeing has a more forgiving `febas` penalty (-1) than being defeated in battle (-2). Thus, an agent who opts to run away often (or fails a disengagement roll and is exiled without putting up a fight) might last longer in the war than one who repeatedly stands its ground. In addition to this, agents can amass a `febas` reserve by defeating enemies during the `enter-combat` or `fight` procedures. An agent that wins battles during an

expedition may theoretically end a round with a positive change in febas even if it is ultimately defeated.

Year	Hazard	CTg-wins (mean)	CTg-wins (standard deviation)	CBR-wins (mean)	CBR-wins (standard deviation)	Ticks (mean)
1276	False	15.3	3.096104	14.31	2.038493	29.61
1276	True	16.25	4.171512	15.13	2.997154	31.38
1317	False	16.1	4.118203	13.44	3.804091	29.54
1317	True	15.69	3.261948	13.67	4.112202	29.36

Table 11: Mean results for Clann Taidhg wins, Clann Briain Ruaid wins and run duration in the four scenarii.

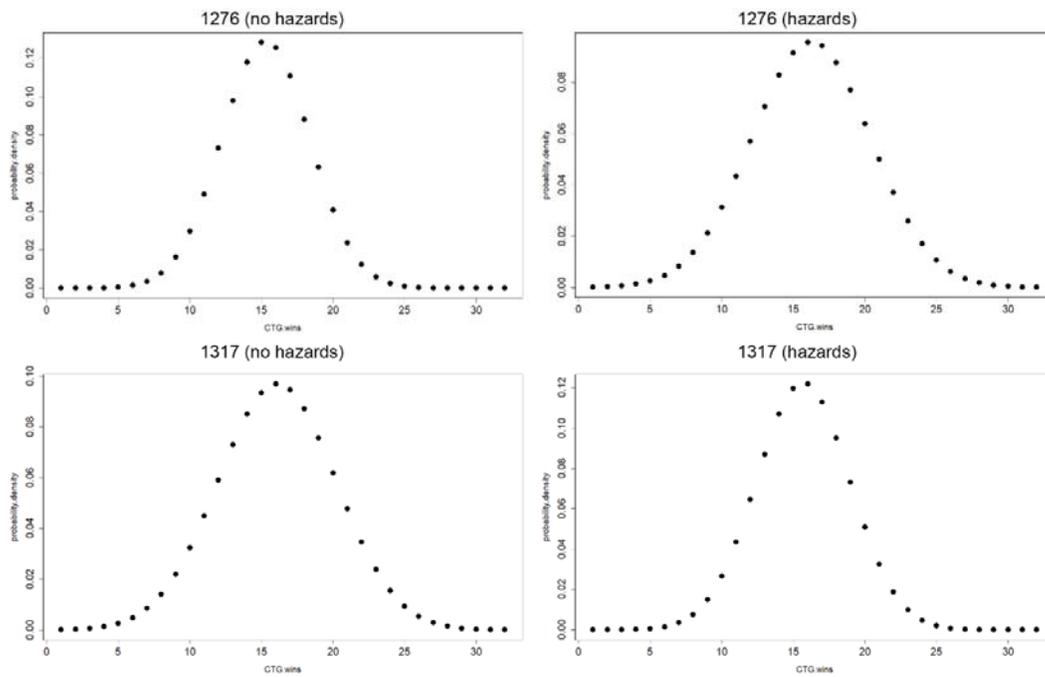


Figure 40: Distribution curves for CTg-wins in all four scenarii

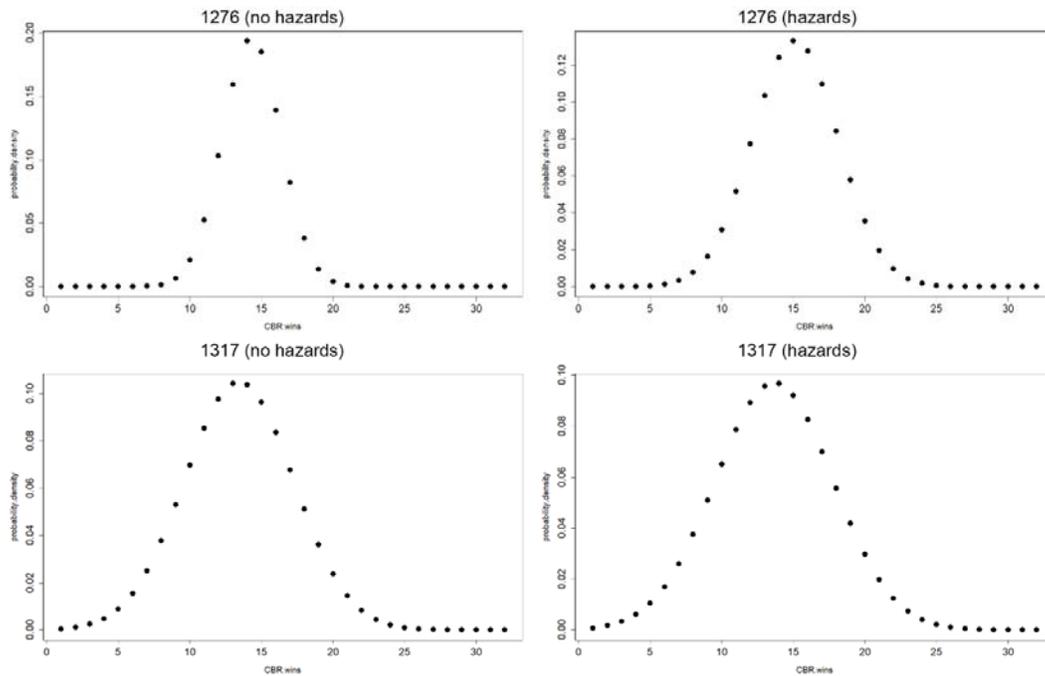


Figure 41: Distribution curves for `CBR-wins` in all four scenarii

Interestingly, the incidence of hazards had opposite effects on the standard deviations of `CTg-wins` (Fig. 40). Whereas for 1276 the hazard scenario produced more spread-out results, the opposite was true for 1317, in which hazard runs were more consistent. This is only partially true for `CBR-wins`, which exhibits differences in standard deviations for the 1276 scenarii, but less expressive ones for the 1317 ones. In all four cases, however, Clann Taidhg obtained the more favorable results.

The reporter `years-under-english-rule` is, naturally, identical to `CBR-wins` in the 1276 scenarii, where the de Clare start as allies of Clann Briain Ruaid (table 12). In the 1317 scenarii, however, `years-under-english-rule` tends to have a higher value than `CBR-wins`, although not as high as `CTg-wins`. The obvious takeaway of this result is that Clann Taidhg sought the alliance of de Clare on at least some of the runs. The more important consequence is that Clann Taidhg’s supremacy cannot be interpreted as a measure of de Clare’s failure or success.

Of more direct relevance to the research question is the fact that `years-under-english-rule` varied along similar lines to `CTg-wins` – in both cases, we observe higher standard deviations in the “1276 with hazards” and “1317 without

hazards” scenarii, and more consistent results in the other two. The incidence of hazards, therefore, seem to have had an impact on political outcomes. But was it a significant - and ultimately important one?

Year	Disaster	“Years” (mean)	“Years” (standard deviation)	Ticks (mean)
1276	False	14.31	2.038493	29.61
1276	True	15.13	2.997154	31.38
1317	False	15.24	4.252438	29.54
1317	True	15.67	3.612702	29.36

Table 12: mean results for `years-under-english-rule` and run duration in the four scenarii.

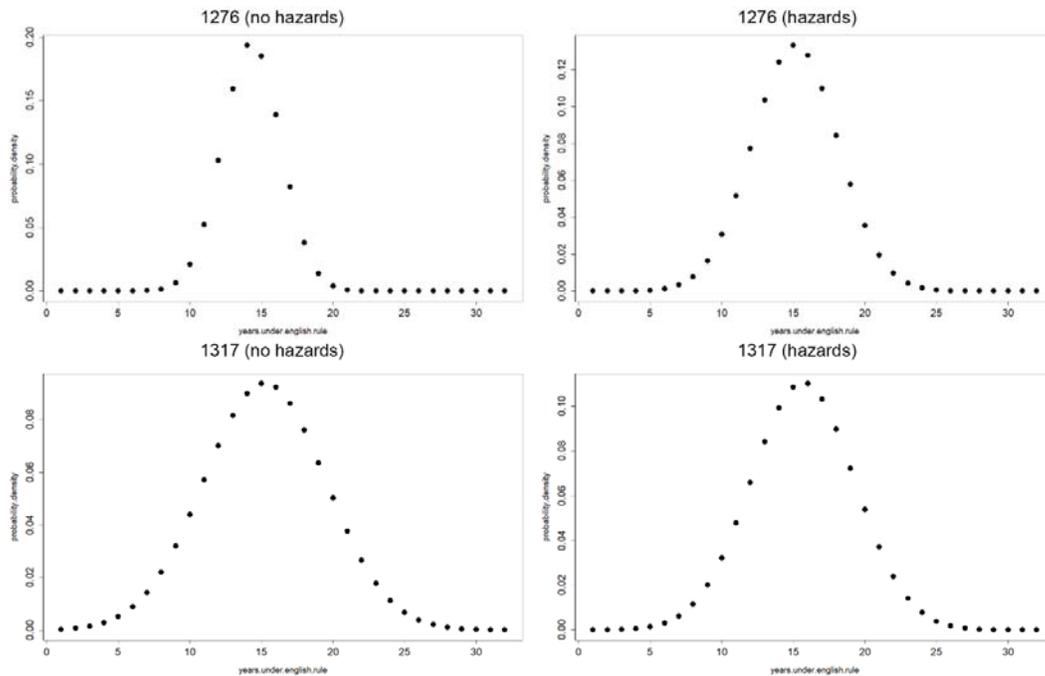


Figure 42: Distribution curves for `years-under-english-rule` in all four scenarii

Chi-square tests between the input parameters `year` and `toggle-hazards`, and the output reporter `ruling-faction` support the impression that initial diplomatic conditions were more important than the impact of extreme events to determine the winner of the war.⁷⁷² The tests showed a significant (p-value = 2^{-7}) correlation for `year` on `ruling-faction`, but not for the `toggle-hazards` on `ruling-faction` (p-value = 0.2095).

To put that impression to the test, I conducted multiple linear regression analyses testing all six economic impact reporters— `devastation`, `total-pounds`, `mean global-pounds`, `max global-pounds`, `mean global-cattle`, and `final-integrity` – as predictors for `years-under-english-rule`,

⁷⁷² A chi-square (or χ^2) test is a procedure that measures the correlation between two sets of categorical variables (ex. “true/false”, “male/female/other”, “right-wing/left-wing”). Like other statistical operations, its results are measured by a number known as p-value. This is a measure of statistical significance – i.e. of how unlikely these results would occur if the null hypothesis (the hypothesis that the effect being measured is 0) is correct. The lower the p-value, the more significant is the result. A p-value of 0.05 is generally taken as a significance threshold; values above that number are considered inadequate to validate the hypothesis.

CTg-wins, and CBR-wins, respectively.⁷⁷³ I also included step – a reporter for run duration, in ticks – as a control variable⁷⁷⁴, as it could work as confounder⁷⁷⁵ due to its strong correlation to CTg-wins (Pearson = 0.7760297) and CBR-wins (Pearson = 0.725129), and years-under-english-rule (Pearson = 0.6792843).⁷⁷⁶ I subsequently eliminated non-significant predictors and conducted additional regressions until only significant predictors remained.

The regression analyses identified total-pounds and max global-pounds as significant predictors for CBR-wins (p-value = 1.248^{-12} for the former, p-value = 0.5664 for the latter) and CTg-wins (p-value = 5.823^{-15} for the former, p-value = 0.02468 for the latter). They also identified devastation (p-value = 0.0002944), mean global-cattle (p-value = 0.0002944), and max global-pounds (p-value = 0.0002944) as predictors for years-under-english-rule. Step proved to be a confounder in all three cases, and its exclusion visibly affected the regression's

773 A multiple linear regression is an operation that generates an equation expressing how the independent and dependent variables of a study (i.e. the “causes” and “effects”) are related. It has many uses in statistics, among which determining which causes are significant predictors of a certain effect (i.e. if the value of A changes, will B change as well?), and whether the variables we have selected are the only possible causes of the phenomenon.

774 A control is an observation designed to minimize the effects of other variables in our study. Let's say, for example, that we want to measure the relationship between income and attendance at classical music concerts. We suspect that people who support these events come from a certain social stratum (i.e. wealthy people go to concerts more often than the poor). However, we believe that locality might also play a role (i.e. people who work close to the concert hall tend to attend its shows, regardless of income). To “control” the effects on locality on the relationship between income and attendance, we must include it in our regression formula. If both regression models (with and without the control) produce very different outputs, we know we are dealing with a confounder (see note below).

775 A confounder is a variable that affects both the independent and dependent variables – i.e. the purported “causes” and “effects”. They can be problematic in quantitative research because they mask – or “confound” – what is truly going on. Imagine, for example, that there is a correlation between fans of the anime *Demon Slayer* and people who often travel to Liberdade, São Paulo's little Tokyo district. At first sight, we may infer that watching *Demon Slayer* makes people more likely to spend their time in Liberdade. However, it may turn out that both variables are, in fact, strongly correlated with being a habitual anime watcher. Therefore, it is not that *Demon Slayer* has an effect on Liberdade's popularity as a weekend destination or vice-versa, but that both activities appeal to fans of Japanese animation, and the people who consume them do so *because they like anime*. In this example, we can say that anime watching behaviour acts as a “confounder” for our model, and its effects should be controlled.

776 The Pearson correlation coefficient is a measure of how linearly correlated two variables are. It ranges from 1 (totally correlated) to -1 (totally inversely correlated), with 0 representing no correlation at all.

R² values (0.5426 to 0.3677 for CBR-wins, 0.6163 to 0.2348 for CTg-wins, and 0.6924 to 0.3868 for years-under-english-rule).⁷⁷⁷

While these reporters do suggest a possible relationship between economic degradation and the outcomes of the war, the actual amplitude of its impact is not always noteworthy. max global-pounds is only barely correlated with CTg-wins and CBR-wins (Pearson = 0.112313 and -0.02874937, respectively). total-pounds is positively correlated with both outcomes (Pearson = 0.3770634 for CTg-wins and -0.3451114 for CBR-wins), but this may be due to the influence of the confounder step, which is also correlated with total-pounds (Pearson = 0.4812962). In the case of years, devastation is very weakly correlated (Pearson = 0.1800883), while mean global-cattle (Pearson = -0.2924342) and max global-pounds (Pearson = 0.379386) exhibit more expressive negative and positive correlations, respectively. This means that the English tend to do somewhat better on runs where they had more pounds on average, and somewhat worse on those in which there is more cattle available – possibly because fuller herds mean stronger Irish opponents. Because max global-pounds is associated with the capacity to amass a surplus, the result also suggests the English tended to fare better the less they had to rely exclusively on their yearly income to fund expeditions. However, given the relatively low R² values of the regressions, we should be wary of reading too much in these results. According to the years-under-english-rule model, the confounding variable accounted for an R² difference of 0,3056 (or 30,56% of the variation in years-under-english-rule), making the experiment duration a more important predictor than almost all economic reporters combined.

Absent this more comprehensive experiment, the data seem to support the conclusion that, rather than being foiled by adverse economic conditions, the de Clares were dealing with an unfavourable political conundrum instigated by *riithe* whom they would never, by themselves, be able to pacify. While toggle-hazards affected the standard deviations of reporters measuring campaign victories, all the other tests seem to support the conclusion that economic degradation alone was insufficient to tilt the outcomes of the war one way or the other.

⁷⁷⁷ An R² is a measure of how much the variance of a dependent (i.e. “effect”) variable can be explained by independent variables (i.e. the possible “causes”). It is given as a percentage. Thus, an R² of 0.642 means that 64,2% of the variance can be explained by the independent variables.

Phrased in such a way, this assessment makes the situation sound worse than it actually was. As Beth Hartland argued, conflict alone was seldom enough to motivate a magnate to relinquish his lands in Ireland, especially when they, like the de Clares of Thomond, were not involved in cross-channel or cross-border landholding.⁷⁷⁸ Moreover, the fact that the English “won” half the rounds in the experiment – i.e. ended the simulation cycle with an ally in power – does not indicate that they “lost” the other half. Rather, if we consider that many campaigns ended before the English even had the chance to mobilize – a king of Thomond who failed a disengagement roll would immediately be exiled, ending the step – a success rate of 50% might well mean that the de Clares won every single counterattack.

In short, and returning one last time to our main research question, can we really say that *the environmental and economic extreme events of the late 13th – early 14th centuries had an impact on the political events in Thomond?* The short answer is “no”. However, it warrants some important caveats that will be discussed in the final section of this thesis.

778 HARTLAND, Beth, Reasons for leaving: The effect of conflict on English landholding in late thirteenth-century Leinster, **Journal of Medieval History**, v. 32, n. 1, p. 18–26, 2006, p. 22.

5. Discussion

In this thesis, I attempted to evaluate the possible impacts of the series of extreme events that beset the British Isles in the late 13th and early 14th centuries – the beginning of the Little Ice Age, the Great Famine of 1315-22, the economic fallout of the wars against the Scots – on the failed English attempt to build a lordship in Thomond between 1276 and 1318. To that end, I created conceptual models of the systems of military logistics, warfare and diplomacy, and implemented them as a scholarly board game – *The Triumphs of Turlough* – and an ABM – ThomondSim. By running and analysing the results of these simulations – qualitatively and via playtesting in the case of the former, quantitatively and statistically in the case of the latter – I concluded that the economic impact of these extreme events was not expressive enough to have tilted the wars of 1276-1318 to one direction or another. Counterfactual scenarios in which no extreme events occur produced outcomes that were comparable to historical ones. Specifically, while markers of economic degradation seem to have had some impact on the performance of the major factions in the conflict, such impact seems to have been of secondary importance at best. Moreover, Clann Taidhg, the faction of the Uí Bhriain that historically won the dynastic conflict, came out victorious in all but 6,25% of the simulation runs. These results corroborate the outcomes of matches of *The Triumphs of Turlough*. Playtesting sessions almost always resulted in the ultimate victory of Clann Taidhg, and players who controlled the English faction found it very difficult to keep a friendly pretender in power.

It is important not to overstate the implications of these results. The scenarios chosen for the ThomondSim experiments took only two possible starting dates into consideration: 1276 and 1317. The *Triumphs of Turlough* playtesting sessions were mostly focused on the first date. Since the underlying conceptual model does not represent all the changes in the political landscape that took place between one year and another, it tends to overemphasize the weight of the starting conditions: after all, the same mix of alliances and rivalries will remain largely unchanged from the first to the last tick. Thus, Clann Taidhg's overwhelmingly favourable outcomes might simply reflect their privileged position in these two specific years. A thorough analysis of the

outcomes of all seven starting dates might reveal further insights. Still, the simulation will only provide valuable insights on process of long-term political change if it incorporates rules concerning the modus operandi of diplomacy outside the regional level. By factoring in the island-wide – and, often, international – dimension of treaties, land grants, and alliance-building, these rules would allow the model to progress to the state of affairs represented by a different starting date – or, at the very least, to a functionally similar landscape. While expanding the model in this direction is theoretically possible, it would require substantially more effort, not to mention the adoption of a far broader geographic and documental scope than it was my intention to engage in with this project.

A second caveat to the results is that, taken at face value, ThomondSim and *The Triumphs of Turlough* portray a reality considerably direr than the past lived by the historical Uí Bhriains and de Clares. Just like I increased the frequency and intensity of extreme events to make these shocks more visible and easier to analyse, I also overestimated the regularity and reach of military expeditions. My model assumes that the ousted faction in the Uí Bhriain succession war will always find external support for an invasion. Not only that, it also assumes that this support will always come from the de Burgh, whence the choice of Kilmacduagh, located on the north-bound road to Connacht, as the spawning location for the exiled pretender’s army. As I have shown in Chapter 3, however, the relationships between magnates were complex, and even inveterate rivals could be persuaded to fight together if the situation demanded. The de Clares and the de Burghs were at odds during a good part of the period under study, and a member of the family was even captured by Richard de Clare during a battle in Thomond in 1311.⁷⁷⁹ In other circumstances, as during the signing of the Turnberry Band or the Dysert O’Dea campaign, they were willing to pledge help to one another.⁷⁸⁰ The de Burghs also acted on behalf of the central government in curbing the

779 “Cogad mor isin bliadhain cedna idir i[n] Clarach 7 O m-Briain 7 Tuadmuma, .i. Sira Riceard de Clara 7 Diarmait mc. Donncaid I Briain d’enleith 7 Doncad O Briain 7 Tuadmumhu ’na n-aigid, 7 Uilliam Burc 7 moran do Conachtaib 7 d’fearaibh Gall Midhi malle riu; 7 tiachtain doib Dia Dardain Fresgabala amair seachtmain l amair caegcidis a n-diaid Mc. Con Mara do marbadh go Bun Raiti 7 maner catha do tabairt do Sira Ricard do Clara 7 do Sira Muiris Riceauard malle h-uaithe do Gallaib Deasman 7 da Gaedealaib malle riu. 7 gid dib is mo ro marbad, ro meabaid rompo 7 ro gabad leo Sira Uilliam Burc 7 amair da fear deg l tri deg do maitib na n-Gall tuaisceartach sin.” AI 1310.10. MAC AIRT (Org.), *The Annals of Inisfallen*, p. 406.

780 Cf. Chapter 3.3, “The Making of Peace”, above.

expansionist desires of the Uí Bhriain, most notably during Toirdhelbhach Ó Briain [9]’s raid of Tipperary in 1287 and the siege of Bunratty in 1298.⁷⁸¹

Even if the de Burgh were interested in getting involved in the wars of Thomond, there was no guarantee they would be able to. According to a 1315 entry from the Annals of Connacht, for example, the “Red Earl” Richard Óg de Burgh [7] narrowly managed to flee back home after being defeated by the Scots only to be swarmed by English and Irish allies imploring for his help.⁷⁸² The year in question was extraordinarily demanding to both magnates and *ríthe* in account of Edward Bruce’s invasion, but warfare was far from a rare occurrence in Ireland, as the copious mentions of conflicts in the Annals and English government records attest. Many Irish lineages of the period, like the Uí Conchobhair of Connacht, experimented decades-long dynastic feuds comparable to the events chronicled by the CT.⁷⁸³ The English had their own baronial wars, and also got involved pledged their soldiers to other magnates on account of indentures and marriage ties.⁷⁸⁴ The Uí Bhriain were not passive spectators of this dynamic political landscape, and occasionally ventured outside of Thomond to participate in external wars.⁷⁸⁵ For the rulers of these kingdoms and lordships, a stable Uí Bhriain kingship could be more beneficial than an endlessly exploitable civil war, as the one ThomondSim was designed to represent. The involvement of Desmond king

781 “Do loiscedh fós le Toirdelbach triatharmach do’n chuairt sin cell mínaightech múrdhomain macámlínmar mórAradh go hainiar martach; agus do ba ri Eirenn do’n dul sin in táirdri acht muna biadh comairleda gusmara guthmilse gallbadhacha in ghlaniarla do thoirmesc Toirdelbach do’n turas sin”. O’GRADY (Org.), **Caithréim Thoirdhealbhagh**, p. 26. “Is do’n dula sin do órdaig Toirdelbach in triathobair nár hórdaiged i nEirinn [a] hintsamail roime riam .i. clárdroiched ciumasréid fiarláid na gaible mara gusin tráig; agus ro ba chorrtha in caislén ó na cóirigtib sin. tigit comairleda in iarla do’n dula sin d’innsaigid Thoirdelbaig dá thoirmesc; agus ó’n ló do gab do láim laochToirdelbach do chomairliugad, ro fágaib in caislén ar in órdugad sin” *Ibid.*, p. 30.

782 “Imtusa inn Iarla 7 Uilliam Burcc 7 na nGall archena. O nach facatur Feidlimid occa furtacht, 7 a sluag fein ar fainnseol, ro impotur ara n-ais o Cuil Rathain co Caislen Conderi. O’tcondcatur Ultaig 7 Alpanaig in ni-sin do lensat co tindesnach ant Iarla co Connderi 7 ar comriachtain doib docum troda do thabairt da cheli do gabad Uilliam Burcc cona ritirib ann sin 7 da mac Meic in Miled, 7 ro teith ant Iarla fein cin furich ar uideaib imthechta otha sin co ranicc a Connachtaib; 7 ro indsaigseatt a cardhi Gall do cech leth int Iarla ar toidecht do a ndochas an Iarla da fortacht 7 da forigtin, 7 tancatur a chardi Gaidel a n-aenfecht ina tech an tan-sin.” AC 1315.9 FREEMAN (Org.), **Annála Connacht: the Annals of Connacht (A.D. 1224-1544)**, p. 236.

783 Cf. MARINO CARVALHO, Vinicius, **Os Reis de Connacht e a Coroa Inglesa, 1189-1274 : Uma abordagem jого-teórica**, Master’s degree dissertation, Universidade de São Paulo, São Paulo, 2016.

784 Cf. Chapter 3.3., “The Making of Peace”, above.

785 “Suaigid la Nicolas fi Muiris 7 la Muiris fi Risibard, 7 la Machtamain mac Domnaill Connachtaigh, tanaisti Tuadmuman, a n-Eallaib 7 cum Deasmuman arceana, 7 nir cumgidar a beag anuilc do deanam acht mad dias do marbad; 7 do marbad da thuisseach maithi do Tuadmuman, .i. O h-Aicir 7 O Deadaigh, 7 dreama do dainibh eili ‘ma ru.” AI 1308.8 MAC AIRT (Org.), **The Annals of Inisfallen**, p. 402.

Domhnall Mac Carthaigh and English magnates from elsewhere in Ireland in the many attempts to partition Thomond between Clann Taidhg and Clann Briain Ruaid suggests that peace between the septs, temporary as it may be, could be in the interests of these political agents. Thus, even if a Uí Bhriain pretender had a steadfast ally willing to aid him seize back power – which, for the reasons above, was never a certainty – it is possible said ally would intervene not to prolong the conflict, but rather to defuse it by encouraging some sort of truce.

The partition issue cast light on another crucial limitation of ThomondSim and *The Triumphs of Turlough*: the way it funnels – or, in ludic parlance, “railroads” – the de Clares into a specific course of action. In both the ABM and the board game, the only strategies available to the magnate agent involve manipulating the Uí Bhriain civil war. It is not possible to force a partition between pretenders – a solution that, while disagreeable to the Irish and unstable to the core, was attempted on multiple occasions – to bully the Irish into ceding land or allowing castles to be built – as was done by other magnates, notably the de Burghs⁷⁸⁶ – to sign indentures with the local *ríthe* – as did the Butlers of Ormond. True enough, with the exception of the partition attempts, there is no evidence de Clare accomplished much with the Uí Bhriain beside meddling in their civil wars. The CT, for whatever its judgements are worth, also makes a point of portraying the lords of Bunratty as notoriously inept negotiators, who constantly backstab their allies and do not even bother to learn the Irish language.⁷⁸⁷ Still, we cannot ignore the fact that the de Clares’ grasp on Thomond was cut short by the death of Richard de Clare in 1318 and that of Thomas, his sole male heir, some years afterwards. That the members of the family who took an interest in Irish politics prioritized a single strategy when dealing with the Uí Bhriain does not mean they were fated to perpetuate that course of action, had they continued to be active in the region. If magnates were capable of responding to economic adversities by adopting more flexible production models, as did the Geraldines of Desmond in course of the 14th and 15th

786 Cf. MARINO CARVALHO, *Os Reis de Connacht e a Coroa Inglesa, 1189-1274 : Uma abordagem jogo-teórica*.

787 In one of the more humorous passages, Richard de Clare is jinxed by Badb, an Irish goddess of war, and asks for an interpreter to translate her curse: “*adubairt in badb: is mise in dobarbrónach, agus is minic chomnaigim i sídib in tíre so; agus is do tuaith iffirnd dam do bunad, agus is do bar gcuirenda tánac, óir is gerr gomad aondúthaig dúinn. Is ann sin ro fíarfaig in Clárach: créd toisc na haimide úd. atá, ar a fíer comagailme, go dobrónach geránach guthainmín ag dénam michelmáine is drochfáistine dúinne do’n turas so; agus is dóchaide dúinn gach sonas do beith inár gcomlenmain a tecmáil orrainn, ar sé, óir aithnigimid gurab ar maíthe le cloinn Toirdelb aig táinic sí do tairmíosc na tosca so orrainn.*” O’GRADY (Org.), *Caithréim Thoirdealbhaigh*, p. 142.

centuries, it is likely they would also be able to overhaul their political and military strategies if the situation demanded.⁷⁸⁸ Investigating which processes of adaptation were undertaken by the English lordships that did manage to politically thrive – or at least survive – into the Later Middle Ages, and which strategies they involved, would be a fruitful avenue for subsequent studies.

My insistence so far in highlighting the shortcomings of my model might give the impression that I believe ThomondSim and *The Triumphs of Turlough* fell short of their explanatory goal. In fact, I would argue the exact opposite. My model was built to cast light on a very specific causal chain: the effects of the extreme events of 1276-1318 on the military logistics during the wars in Thomond. If, at the end, the results of the experiment encourage us to look for external causes for de Clare's failures it is arguably because regional circumstances alone are insufficient to explain the difficulties faced by the lords of Bunratty. If anything, disregarding external pressure from other political agents, as well as indirect effects of the extreme events on other localities, ThomondSim and *The Triumphs of Turlough* make an even more persuasive case against a maximalist reading of the effects of these upheavals. This is because, in some circumstances, taking these factors into account would produce a more forgiving disaster model than the simplistic and self-contained Thomond created in this project. In both the ABM and the board game, for instance, ousted pretenders who are not supported by the lords of Bunratty always spawn with a semi-random number of battles and provisions – representing the support of the de Burghs of Connacht – that are not affected by any disaster. In reality, any extreme event severe enough to be felt in Thomond would likely send ripples through the entire Lordship of Ireland, potentially compromising the willingness of magnates and justiciars to spend resources on a war beyond their immediate spheres of influence. While seemingly small at first sight, this little idiosyncrasy forces the de Clares to face a recurrent (and ahistorical) predicament, as their recruiting and provisioning capacity fluctuates according to economic conditions, but those of their enemies always remain high.

Somewhat ironically, therefore, the historical kingdom of Thomond was far more stable than the environments of ThomondSim and *The Triumphs of Turlough*, and the wars of 1276-1318, fundamentally less intense than its virtual counterpart. Without a continuous streak of large-scale military operations funded by coyne & livery, the

⁷⁸⁸ Cf. WATERS, *The Earls of Desmond in the Fourteenth Century*.

local economy would have had more opportunity to recover from both anthropogenic devastation and the worst effect of wet spells, cattle murrains, and harvest failures. Consequently, the resulting economic degradation on these communities would be even less accentuated.

One way the challenging environmental conditions of the early 14th may have affected the Anglo-Irish frontier was in narrowing the window of opportunity within which expansionistic projects such as the de Clare's were feasible. The English push into Thomond happened at the very end of a period of expansion of the Lordship of Ireland, in which the colony was turning out a profit for the Crown and "financial and commercial dislocation remained limited and localized".⁷⁸⁹ By the 1321, year of the second Thomas de Clare's death, the Lordship was reeling from the devastation of the Bruce Invasion, its resources were being siphoned off to pay for the continuing war in Scotland, the flow of colonists to Ireland had ground to a half and even some magnate families had started to abandon their Irish interests.⁷⁹⁰ Beth Hartland noticed that English lords were still willing to get involved in the defense their Irish lands, but only insofar as they represented a significant share of their sources of income.⁷⁹¹ This was certainly the case of Richard de Clare, who perished, sword in hand, protecting his interests in Thomond. It was not, however, the case of the Anglo-Irish lineages who inherited whatever remained of his lands after the death of his son, for whom the prospect of carving out a new lordship was simply not worth the effort. The situation would only get more dire in the following decades thanks to the demographic effects of the Black Death, loss of settled land to emboldened Irish *ríthe*, and the beginning of the Hundred Years War. Evaluating the impact of the plague and of the "uniquely disturbed and climatically unstable" atmospheric conditions of the 1340s and 1350s⁷⁹² on the events of the period is a line of research that begs for an agent-based approach and will hopefully one day inspire its own ABM.

Final remarks

789 CAMPBELL, Benchmarking medieval economic development: England, Wales, Scotland, and Ireland, c.1290, p. 898.

790 DAVIES, R. R., **The First English Empire: Power and Identities in the British Isles 1093-1343**, Oxford: Oxford University Press, 2002, p. 179.

791 HARTLAND, Reasons for leaving, p. 20.

792 CAMPBELL, **The Great Transition**, p. 277.

In a discussion about how ABM could contribute to historical research, Edmund Chattoe-Brown and Simone Gabriellini noticed that most historically-themed ABMs operate on an “anthropological conception of history” according to which “agents behave according to fixed social rules that are simply played out over time”.⁷⁹³ They make no effort to represent dynamics that could alter the very rules of a system, such as social innovation or institutional change. For all of its historical validity – and its potential usefulness for both research and education – ThomondSim and *The Triumphs of Turlough* share this blind spot. However, I hope to have shown that a model does not have to perfectly account for historical change to provide valuable insights about historical processes. History is indeed complex, multicausal, and always in motion, but historical monographs are not always concerned with the biggest possible picture. If ThomondSim and *The Triumphs of Turlough* run on “anthropological” rather than “historical” time, it is because my research design so demanded. The most visible political changes in medieval Thomond happened either before (the Uí Bhriain establishment of Clonroad, the coming of the English) or after (the Mic Conmara expansion over *trícha céit* Uí mBlóid, the Gaelic takeover of Bunratty) the wars of 1276-1318. The factors that conditioned short-term political change (marriage alliances, interventions by the justiciar, the Bruce Invasion) are either non-systematic or are not explained by regional causes. To include them in my model, it would be necessary to either script them or come up with arbitrary, possibly randomized rules. The latter would not be a historically valid solution; the former would hardly be a solution at all.

That my modeling of extreme events performs better in light of Chattoe-Brown and Gabriellini’s remarks – after all, drawn hazards alter the probability of new ones, allowing medium-term degradation to occur – indicates that the difference between “anthropological” and “historical time is not so clear-cut. This is possibly due to the fact that, in practice, a historical model may run on both varieties of “time” at once. This is, in fact, a very old observation, dating back to Fernand Braudel, one of the first historians to highlight the usefulness of formal modelling and to promote a dialogue with what he used to call the field of “social mathematics”.⁷⁹⁴ As he once famously argued, not all varieties of historical change can be perceived with the same lens. Some

793 CHATTOE-BROWN, Edmund; GABBRIELLINI, Simone, How Should Agent-Based Modelling Engage With Historical Processes?, in: JAGER, Wander *et al* (Orgs.), **Advances in Social Simulation 2015**, Cham: Springer International Publishing, 2017, p. 55.

794 BRAUDEL, Fernand, Histoire et Sciences sociales : La longue durée, **Annales**, v. 13, n. 4, p. 725–753, 1958, p. 739.

require magnification; others, that we take a step back. It may well be that model-based history is more attuned to the *durée* of cliometrics, with its cycles of “ten, twenty or fifty years”.⁷⁹⁵ The sudden deaths, changes of heart and serendipity of *histoire événementielle* are swept under its fascination for rules and mechanics, repetitions, and regularities. The centuries-long developments of the *longue durée* are possibly too complex to be responsibly predicted – at the very least, within the confines of an individual research project. ABM may one day find a niche around these limitations, as it did within history’s sister disciplines, anthropology, and archaeology. However, we should not let our acknowledgement of its shortcomings turn to complacency. As Braudel admonished, “a clear conscience this plurality of social time is indispensable to a common methodology of the human sciences”.⁷⁹⁶ Historians who turn to modeling with the specific hope of building bridges with other fields, whichever they may be, would do well to heed these words.

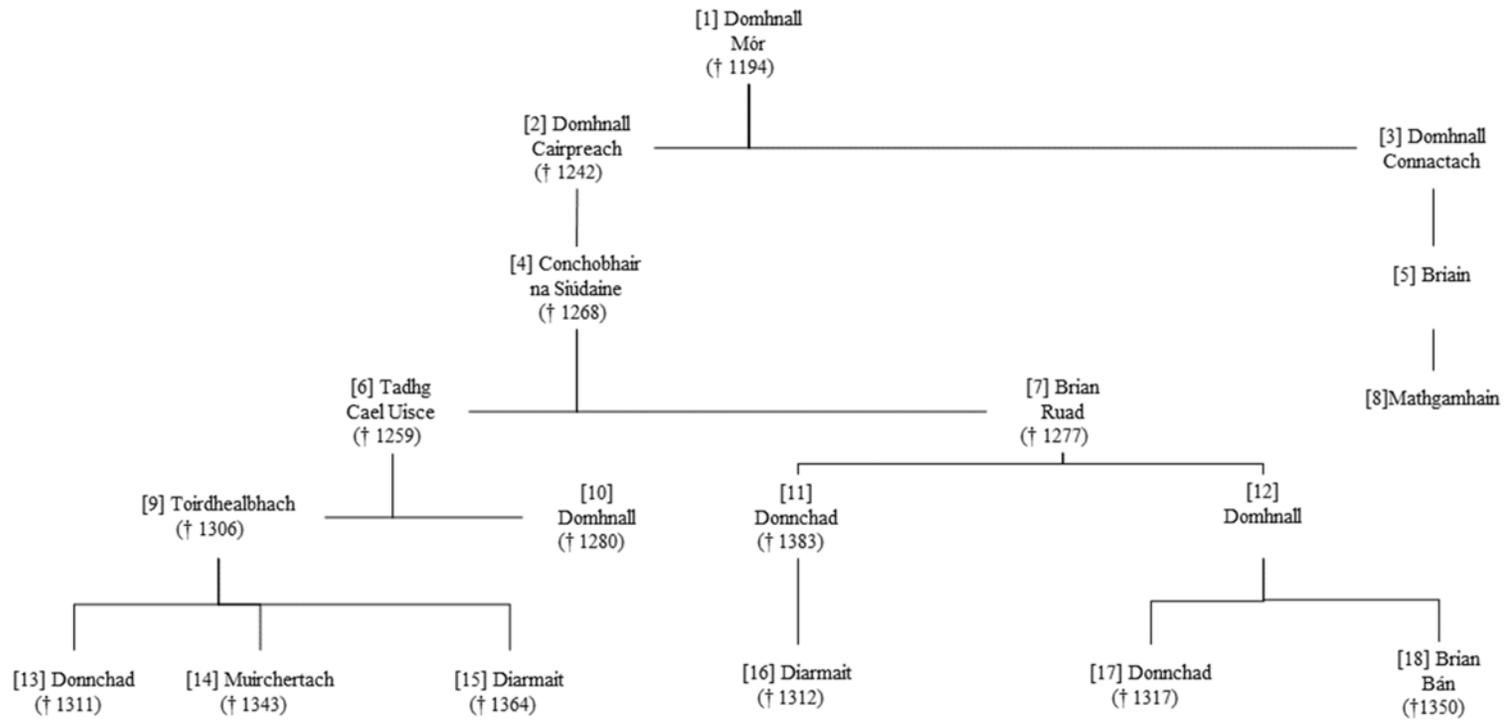
⁷⁹⁵ *Ibid.*, p. 727.

⁷⁹⁶ *Ibid.*, p. 726.

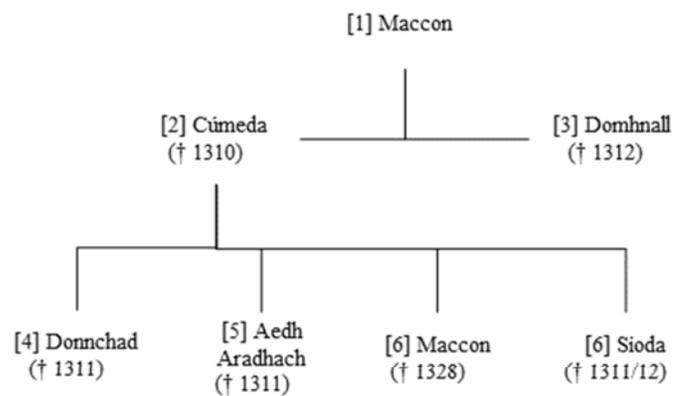
Appendix 1: Genealogies

All genealogies are simplified and are meant solely to contextualize persons mentioned in the text

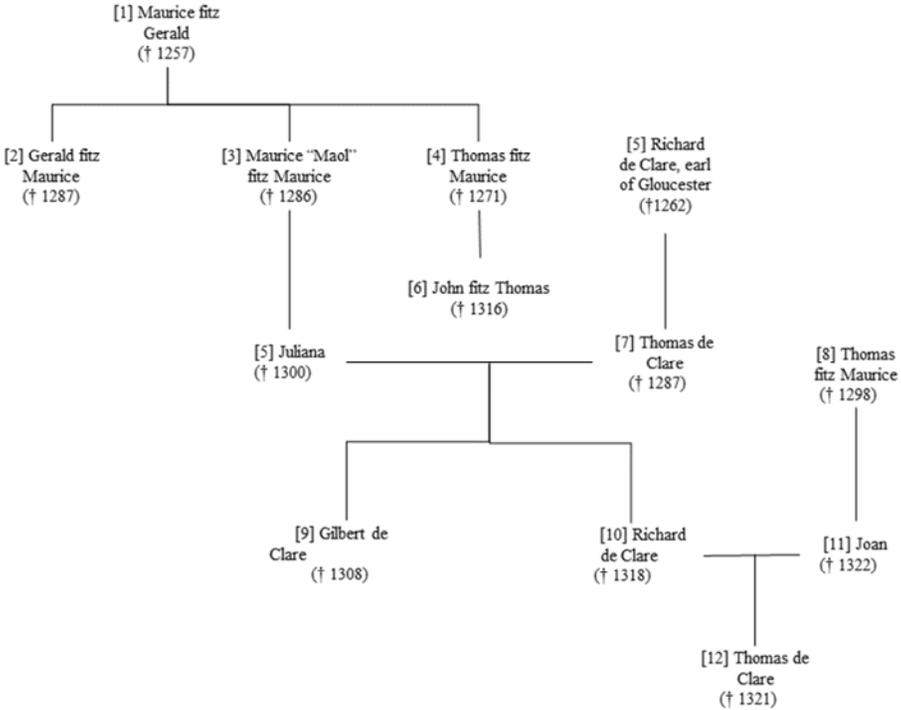
The Uí Bhriain, kings of Thomond



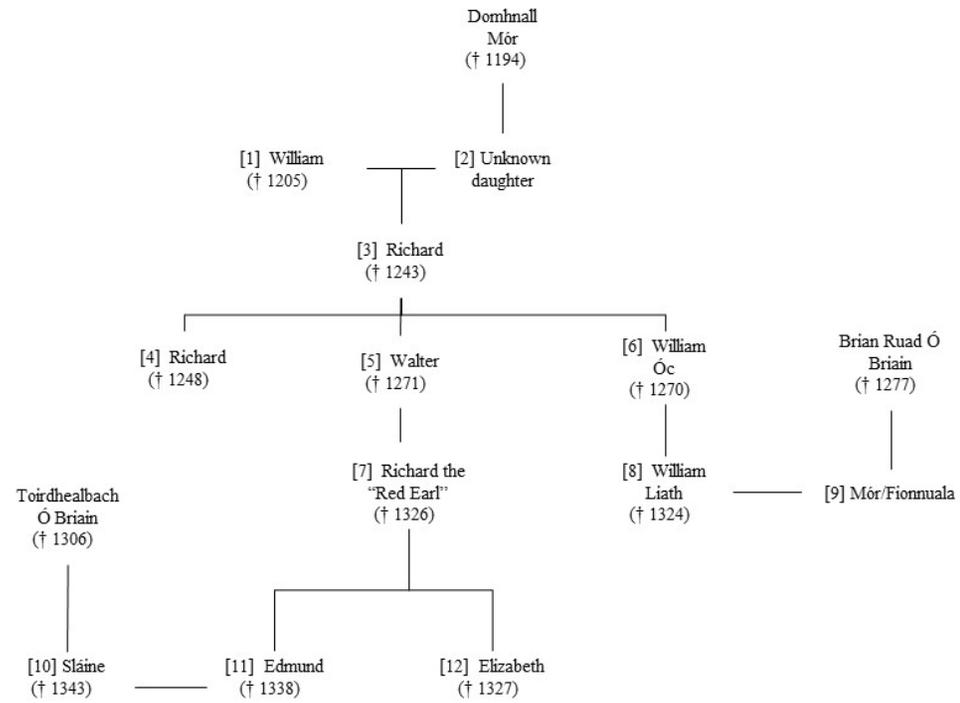
The Mic Conmara, kings of Clann Chúillen



The de Clares and Geraldine connections



The de Burghs and Uí Bhriain connections



Appendix 2: *The Triumphs of Turlough's Rulebook*⁷⁹⁷

Introduction

In the thirteenth century, Ireland was a lordship of the English Crown. Part of the island was under the rule of English settlers, who lived by customs and institutions inspired by those of their country of origin. Another part comprised dozens of Gaelic kingdoms ruled by lineages whose existence dates back centuries.

Thomond, in Southwest Ireland, was one of these kingdoms. Its kings, the O'Brien, were generally supportive of the Crown's agenda, although, like all Irish rulers, their major concern was to maintain their own domains. They paid tributes to the king of England and acted as allies of English magnates in the island.

Irish lineages, however, were remarkably unstable. Their succession process often escalated to disputes or dynastic civil wars. In 1276, one such conflict erupted in Thomond, opposing two rival factions of the O'Brien: Clann Turlough and Clann Brian Roe. The devastation was so widespread that it prompted the local English lord, Robert of Muscegros, to give up his lands in Ireland.

To protect English interests in the region, the king Edward I conceded Muscegros' land to Thomas de Clare, one of his household knights. If de Clare managed to pacify the O'Brien, he would become lord of Thomond.

The *Triumphs of Turlough* is a strategy game set between 1276 and 1318, when de Clare and his descendants struggled to transform Thomond into an English lordship. It portrays the strategies taken by the Irish and the English to navigate the traps and opportunities opened up by the conflict.

Goal

The goal of the game is to end the war between Clann Turlough and Clann Brian Roe on behalf of one side of the conflict.

The game ends when one of the claimants is eliminated. This happens when a player exhausts their *febas points*.

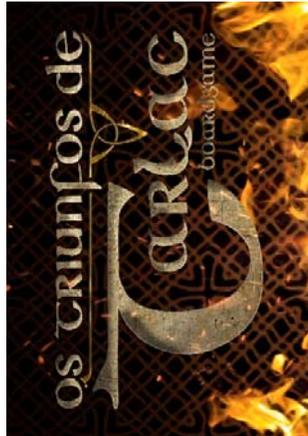
⁷⁹⁷ *The Triumphs of Turlough* will be available in two versions: one in English and one in Portuguese. The English one, whose rules are here presented, uses mainstream English translations of Irish names. The Portuguese one – Os Triunfos de Tarlac – uses the Irish ones and comes with a pronunciation guide.

A player is deemed the winner if:

- a) They are playing with either Clann Turlough or Clann Brian Roe and
 - a. eliminate the rival claimant.
 - b. accumulate 5 *febas* points
- b) They are playing with allies of Clann Turlough or Clann Brian Roe and their respective claimant wins the game.
- c) They are playing with de Clare and have a hostage from the surviving claimant.

Game Elements

Hazard Cards



They represent events and phenomena that affected Ireland from 1276 to 1318.

A hazard card is revealed at every maintenance phase. Its effects persist until the next card is revealed.

Provision Tokens



Grains, beverages and other supplies needed to cater for a moving army. Used to supply soldiers in campaigns.

Battle Tokens



A division of warriors at the king's or magnate's service.

During the expedition and battle phases, they represent a player's hit points.



Cattle Tokens



Currency of Gaelic Ireland's economy. Used to pay tributes, recruit, and supply soldiers.

Febas Tokens



Measurement of an Irish king's political virtue.

If a player loses all *febas* tokens, they are eliminated from the game.

**Devastation
Tokens**



Settlements receive devastation tokens when they are plundered or subjected to *coyne*.

If a settlement accumulates 10 devastation tokens, the token pile is flipped and becomes a destruction token.

**Destruction
Tokens**



Represent a settlement that was completely destroyed.

Destroyed settlements take longer to lose their devastation status.

One pound token



English economy's currency in Ireland. Used to pay soldiers and provisions. Tokens come in four varieties: one, two, five and ten pounds

Two pounds token



Five pounds token



Ten pounds token



Hostage figurine

Indicates who has the player's hostages.

Players are compelled to obey those who have their hostages whether they are allied to them or not.

Army figurine

Represents the position of a player's army on the board. Used for moving around and attacking enemies

Settlements

There are three basic settlement types in the game:

Longport



Residence or fortress belonging to an Irish king. Needed to mobilize armies.

Players who are not exiled start the game on one of these tiles.

Castle



Fortress of the de Clare. They have the same role as *longphoirt*, but must be attacked before they can be raided.

Monastery



Important church serving as a local economic hub. Can be raided by players or used as overnight accommodation.

Some settlements have special features depending on the chosen scenario:

Quin



This castle was built in 1280-81. It is not part of the game in the 1277 and 1278 scenarios.

Dubh Glen



Functions as the initial *longport* of Clann Brian Roe in the 1281, 1284 and 1317 scenarios. It functions as a monastery in other rounds and scenarios.

Kilmacduagh



Place where the exiled claimant mobilizes his armies if not in coalition with de Clare. (See “3.1. Mobilizing” below).

Feakle



Place where the de Clares mobilize in the beginning of the 1315 scenario.

Factions

Factions are the political units that players must lead during the game. Each controls settlements distinguished by a specific roof color:



Claimants



Clann Brian Roe



Clann Turlough

Claimants are the O’Brien factions fighting for Thomond’s supremacy. Depending on the initial scenario chosen, one of these factions can start the game exiled (see “Scenarios” below).

Claimants have the ability of mobilizing other players and taking hostages. If they are not exiled, they also receive tributes from vassal factions.

The non-exiled claimant starts the game in Clonroad (purple *longport*) If both claimants start the game on the board, Clann Turlough starts the game in Clonroad and Clann Brian Roe in Dubh Glen (dark purple *longport*).

Lesser Kings

Other Gaelic factions in Thomond caught in the crossfire between Clann Turlough and Clann Brian Roe.

These kingdoms are subdivided into two groups:

Vassals:



Clann Cullen

c



Cenel Fermaic



Cenel Dungaile



Corcovaskin



Hy Blood

They owe tributes to the sitting king of Thomond (or, in case Thomond is split into two, to the leader of their part of the kingdom).

Independents:



Corcomroe



Burren

They do not pay tributes.



The Tanist

Mahon O'Brien and his descendants were a third faction of the O'Brien that, unlike Clann Turlough and Clann Brian Roe, have never sought power for themselves. Nevertheless, they were locally powerful and often supported one of the claimants.

In terms of gameplay, they combine characteristics of both vassals and claimants. They owe tributes to the king of Thomond, however, like him, the power of **mobilizing other factions** and **taking their hostages**.



De Clare

The de Clares are the English family to which Thomond kings owed tributes and obedience.

In view of their cultural differences, they have different mechanics and victory conditions.

Coalitions

In addition to the obligation of paying tributes, factions can develop two types of relationships:

Alliances: represent marriage bonds, sponsorships and lasting military alliances between a claimant and a lesser king.

Each faction's alliances are given by the chosen scenario and cannot be cancelled during the game. (See "Scenarii" below).

The player who controls a lesser king and who has an alliance with a claimant must ensure that their ally is victorious in order to win the game.

Hostages: They represent *ad hoc* deals sealed with the surrender of hostages. As opposed to alliances, hostages can be "freed" if the player controlling them is exiled or eliminated during the combat phase.

Players must obey those who have taken their hostages, even if they are enemies of their allies.

Refusing to do so leads to hostages being killed, and such player will lose 1 *febas* point.

The set of factions tied to a claimant by means of alliances or hostages forms a coalition. They comprise the "sides" of war at every moment of the conflict and affect victory conditions.

Coalitions are fluid and vary according to the chosen initial scenario:

Scenarii

Scenarios are the game's initial conditions. They represent Thomond's geopolitical landscape in seven different moments of history.

1276: The Arrival of the de Clares

In 1276, king Edward I of England appointed Thomas de Clare as Lord of Thomond. With the help of his father-in-law, Maurice Fitz Maurice, de Clare set up a military expedition to inaugurate his Irish ally, Brian Roe O'Brien, as king of Thomond.



Clann Turlough

V

**Clann Brian
Roe**



Clann Cullen



Hy Blood



**Thomas
de
Clare**

Scenario Features:

- **Hazard Deck:** 12x Heavy Rainfall, 5x Wars in Scotland, 2x Wars in France, 3x Wars in Wales, 3x Harvest Failure
- **Maurice fitz Maurice:** de Clare counts with extra resources due to his alliance with the Fitz Maurice. He starts the game with £24 pounds
- **Surprise Attack:** Turlough O'Brien was procuring hostages from his vassals when he received news of the invasion. During the first war phase, Clann Turlough mobilizes in Kildysert (orange *longport*) with only **1x battle token**. He starts with hostages from Corcovaskin.
- Clann Brian Roe starts the game exiled.
- De Clare mobilizes at the beginning of the first war phase.

1277: The Return of Turlough



Clann Turlough



**Clann Brian
Roe**



Clann Cullen



**Thomas de
Clare**



Cenél Fermaic



Hy Blood

Turlough was ousted by de Clare and Brian Roe, but the war for Thomond is just beginning. With the help from his English ally, Richard de Burgh, he gathers an army to take back his kingdom.

Scenario Features:

- **Hazard Deck:** 12x Heavy Rainfall, 5x Wars in Scotland, 2x Wars in France, 3x Wars in Wales, 3x Harvest Failure
- **Richard de Burgh:** During the first war phase, Clann Turlough mobilizes in Kilmacduagh with 10 battle tokens and 10 supplies.
- Clann Turlough starts the game exiled.
- Clann Turlough starts with hostages from Corcovaskin and Corcomroe.
- Clann Brian Roe starts with hostages from Cenél Dunghaile.
- De Clare starts with hostages from Clann Brian Roe.
- Clann Turlough mobilizes at the beginning of the first war phase.

1281: The Partition of Thomond

The endless war between Clann Turlough and Clann Brian Roe starts to extrapolate Thomond's borders. To prevent the instability from spreading to their lordships, the English barons of Ireland and the king of Desmond, Donal Roe, broker an agreement according to which Thomond is to be split among the claimant factions.

How long will this peace last?



Clann Turlough



**Clann Brian
Roe**



Clann Cullen



Burren



Corcovaskin



Cenel Dungaile



Cenel Fermaic

Scenario Features:

- **Hazard Cards:** 12x Heavy Rainfall, 5x Wars in Scotland, 2x Wars in France, 3x Wars in Wales, 3x Harvest Failure
- Clann Turlough controls Clonroad (purple *longport*) and receives tributes from Clann Cullen, Hy Blood and Cenel Dungaile. Clann Brian Roe controls Dubh Glen and receives tributes from Cenél Fermaic, Corcovaskin and the Tanist.
- Clan Turlough mobilizes at the beginning of the first war phase.

1284: The Absence of Thomas de Clare

In 1284, Thomas de Clare left Ireland to take care of his lands in England. Unsatisfied with the partition of Thomond, Turlough O’Brien seizes the opportunity to take the kingdom for himself.

This time, Clann Brian Roe will have to defend themselves without English aid.



Clann Turlough



Clann Brian Roe



Burren



Corcomroe

Scenario Features:

- **Hazard Cards:** 12x Heavy Rainfall, 5x Wars in Scotland, 2x Wars in France, 3x Wars in Wales, 3x Harvest Failure
- Clann Turlough controls Clonroad (purple *longport*) and receives tributes from Clann Cullen, Hy Blood and Cenél Dunghaile. Clann Brian Roe controls Dubh Glen and receives tributes from Cenél Fermaic, Corcovaskin, and the Tanist.
- de Clare won't mobilize during the first war phase
- Clann Turlough mobilizes at the beginning of the first war phase.

1315: The Scottish Invasion

Edward Bruce, king Robert of Scotland's brother, invades Ireland, opening a second front in the war against the English. Richard de Clare is summoned at haste to help defending the Lordship.

Betting on a Scottish victory, however, Clann Brian Roe rises against their erstwhile English allies. Undermined by this treason, de Clare forms an unlikely alliance with Clann Turlough to reestablish peace in Thomond.



Clann Turlough



Clann Brian Roe



Clann Cullen



Hy Blood



Richard de Clare



The Tanist



Cenél Fermaic



Cenél Dunghaile

Scenario Features:

- **Hazard Cards:** 5x Heavy Rainfall, 6x Liver Fluke Disease 5x Wars in Scotland, 5x Harvest Failure, 4x Famine
- **Little Ice Age:** the game starts under the effects of a Harvest Failure.
- **The Bruce War:** Edward Bruce's invasion struck at the heart of the de Burgh lordship. The family does not have troops to spare for their Irish allies. During

the first war phase, Clann Turlough mobilizes in Kilmacduagh with a single battle token.

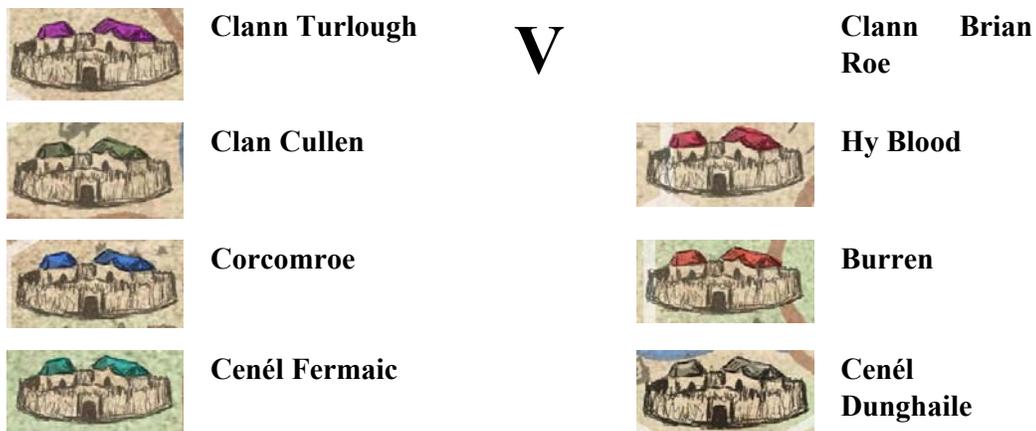
- The tanist starts the game with hostages from Clann Cullen.
- Clann Turlough starts the game exiled.
- During the first war phase, de Clare mobilizes at Feakle.
- Clann Turlough mobilizes at the beginning of the first war phase.

1317: The Battle of Lough Rask

The Scottish invasion spreads hunger and devastation throughout Ireland. Unable to feed his soldiers, Edward Bruce calls up his invasion of Thomond and retreats to his seat of power up north. Clann Brian Roe's rebellion is rooted out and the de Clare lordship is safe. For now.

Unable to trust in either of the O'Brien, Richard de Clare partitions Thomond once again. In 1317, however, he is summoned once more to Dublin to discuss Ireland's defense.

It won't be long until both lineages start mobilizing for war again.



Scenario Features:

- **Hazard Cards:** 3x Heavy Rainfall, 2x Liver Fluke Disease 5x Wars in Scotland, 5x Harvest Failure, 10x Famine
- **Little Ice Age:** the game starts under the effects of a Harvest Failure.

- Clann Turlough controls Clonroad (purple *longport*) and receives tributes from Clann Cullen, Hy Blood and Cenél Dunghaile. Clann Brian Roe controls Dubh Glen and receives tributes from Cenél Fermaic, Corcovaskin and the Tanist.
- De Clare won't mobilize during the first war phase.
- Clann Brian Roe mobilizes at the start of the first war phase.

1318: The Battle of Dysert O Dea

Since the arrival of the de Clare, the tanist Mahon O'Brien and his descendants have been an obstacle for Clann Turlough. With Clann Brian Roe temporarily neutralized, the king of Thomond has the perfect opportunity to put an end to their influence.

Richard de Clare, however, will not let his most powerful ally be defeated that easily.



Clann Turlough

V



Richard de Clare



Clann Cullen



The Tanist



Corcomroe



Cenél Fermaic

Scenario Features:

- **Hazard Cards:** 3x Heavy Rainfall, 2x Liver Fluke Disease 5x Wars in Scotland, 5x Harvest Failure, 10x Famine
- **The Great Famine of 1315-22:** the game starts under the effects of a Famine.
- Clann Brian Roe starts the game exiled.
- Clann Turlough mobilizes at the beginning of the first war phase.

Choosing a faction to play

The game can be played by 3 to 6 players. 5 is the ideal number.

In a **3 player setting**,

- one player controls Clann Turlough **and** all their allies
- one player controls Clann Brian Rua **and** all their allies
- one player controls de Clare.

In a **4 player setting**,

- one player controls Clann Turlough
- one player controls Clann Turlough's allies
- one player controls Clann Brian Rua **and** their allies
- one player controls de Clare

In a **5 player setting**,

- one player controls Clann Turlough
- one player controls Clann Turlough's allies
- one player controls Clann Brian Rua
- one player controls Clann Brian Rua's allies
- one player controls de Clare

In a **6 or more player setting**,

- one player controls Clann Turlough
- one player controls Clann Brian Rua
- one player controls de Clare
- the rest of the players divide the factions' allies between themselves

Neutral factions at the beginning of a scenario may become an ally to one of the claimants if mobilized during wartime (See 3.3. "Mobilizing other factions" below). From this point on, they will be controlled by whoever controls a claimant's allies.

A lesser king bound by hostages to a player of the opposite coalition will **not** change hands.

Setting up the Game

- 1) Players choose the scenario they wish to start in.
- 2) Each player chooses a faction. It is mandatory that Clann Turlough, Clann Brian Roe and the de Clares are picked by the players.
- 3) Players receive the following pieces depending on the faction they are controlling:
 - 1 army figurine with their faction color per faction controlled (all factions)
 - 3 *febas* tokens (only Irish factions)
 - 5 cattle tokens per faction controlled (only non-exiled Irish factions)
 - Extra pieces depending on the scenario chosen (including alliances and hostages)
- 4) One of the players builds the Hazard deck according to the scenario rules and then shuffles it.

*Note: Players controlling the allies of Clann Brian Roe and Clann Turlough keep independent cattle token stacks for each faction they control, but a **single** febas stack.*

Note 2: A neutral lesser king that is 'recruited' as ally enters the game with 5 cattle tokens. From this point onward, their cattle stack will be affected by hazard cards and replenished each turn (See 2.1. "Replenish Cattle Herd" below).

Round Structure - Summary

Pre-maintenance

- 1.1. – Remove devastation tokens
- 1.2. – Draw hazard card
- 1.3. – Add cards to hazard deck

Maintenance phase (each player performs the steps below sequentially. After everyone has played, the war phase begins).

- 2.1. Replenish cattle herds
- 2.2. Pay/receive tribute

Expedition phase (each player performs the steps below sequentially. After everyone has played, the battle phase begins).

- 3.1. Mobilizing
- 3.2. Moving
- 3.3. Mobilizing other factions
- 3.4. Entering combat
- 3.5. Raiding
- 3.6. Provisioning
- 3.7. Demobilizing

Battle phase (the steps below are performed by all players at the same time. If, by the end of this phase, there are still mobilized armies on the board, the game returns to the expedition phase. If not, it advances to the next pre-maintenance phase).

- 4.1. Fighting
- 4.2. Provisioning

Stages of the Game

Pre-maintenance

Pre-maintenance represents the kingdom's recovery after a war season, as well as from the incidence of economical or environmental Hazards.

It is comprised of three stages:

1.1. Removing Devastation Tokens

Players remove two devastations tokens from each non-destroyed settlement on the board. They also flip back any destroyed settlements.

1.2 Drawing Hazard Cards

One of the players buys a Hazard card. The effects of such card remain until the next pre-maintenance phase.

1.3. Adding to and Removing Cards from the Hazard Deck

Certain Hazard types increase the probability of other calamities. In the game, this is represented by adding extra cards to the deck as the events take place.

If the card drawn by the claimant in the step above is one of the listed in the table below, they add the cards listed below to the deck. Then, they **remove** the extra cards added in the previous round and shuffle the deck.

Hazard Type	Cards to be added to the deck
Heavy Rainfall	8x Liver Fluke Disease and 4x Harvest Failure
Harvest Failure	4x Famine

Maintenance Phase

The maintenance phase represents the preparation months before a war season.

This phase is played only once per round.

Turn Order Within the Round:

1- **Clonroad Occupant**

2- **De Clare**

3- **Other factions:** players who have not picked the factions above roll a dice to determine the round order. The player who obtains the highest result plays first. If two or more people tie, they roll the dice again until one of them obtains the highest result.

If the scenario in question starts with an exiled claimant, they won't play during this phase. Instead, they acts as a referee, making sure that other players properly play the stages and buy the correct number of tokens.

2.1. Replenish cattle herds

Players who have at least one cattle token buy three cattle tokens.

The maximum number of cattle tokens a player can have is 10. If a player has 10 cattle tokens during this phase, they won't buy a new token. Instead, they buy a *febas* token.

2.2. Paying/Receiving Tributes

Thomond's kings and magnates were part of a hierarchy according to which some rulers owed others tribute:

Allied **vassals** and/or players who have given hostages to the king of Thomond owe tributes to him. During their maintenance, they provide a cattle token to the player controlling Clonroad.

Note: At the beginning of the 1281, 1284 and 1317 scenarios, vassals pay tributes to the king seated on his half of Thomond. (See “Scenarios” above)

Claimants who have given a hostage to de Clare owe tributes to him. During their maintenance, they provide a cattle token to the player controlling Bunratty.

De Clare owes no tributes to any Irish player. During their maintenance, they receive **£18** plus **£1** for each non-destroyed monastery in Bunratty. This value corresponds to the taxes from their tenants in Thomond and other manors in Ireland and England.

End of the Maintenance Phase:

When all players have replenished their cattle and paid tributes, the game continues to the expedition phase.

Expedition Phase

During the expedition phase, players can mobilize armies, plunder settlements, and attack their opponents. This phase represents the military campaigns in and of themselves.

Turn Order Within the Round:

The expedition phase follows a different round order than the maintenance phase. This sequence is determined by **the order in which factions have mobilized their armies.**

Factions who have not mobilized do not play until doing so.

3.1. Mobilizing

To begin the expedition phase, a player must mobilize their army. This task consists of buying resources and recruiting soldiers to carry out military operations.

Battle Tokens represent warrior divisions at the player’s service. The more battles under their control, the greater their army’s strength during combat. Each player can recruit up to 10 battles.

Provisions represent food, water, and other supplies needed to keep an army mobilized. At the end of each round, an army consumes a number of provisions equal to its number of battle tokens. If a player does not have sufficient provisions at their disposal, their armies will be automatically demobilized.

Cattle Tokens can be used in lieu of provisions.

Mobilization Rules

English and Irish factions have different mobilization rules:

English buy battle and provision tokens in exchange for **pounds**. The base value of a provision token is **£1**; for an army token, it is **£3**.

Irish can buy battle tokens in two different ways:

- a) **Coyne**: In Irish, “quartering”. Refers to the obligation of providing supplies and hospitality to the king’s troops. If a player opts to pay their troops with *coyne*, they add a devastation token to the capital for each battle token they wish to purchase.
- b) **Tuarastal**: in Irish, “wages”. This was the payment given to mercenaries. If a player wishes to recruit their troops with *tuarastal*, they pay a cattle token for each battle token.

Irish kings can use both payment methods at the same time, paying for some tokens with devastation and for other with cattle. This can be useful to prevent a *longport*’s devastation from dangerously increasing or to spare resources.

Note: the English cannot purchase cattle when mobilizing, but they can use cattle that they’ve acquired from other methods (e.g., plunder, tributes) as a provision source.

Note 2: Similarly, Irish cannot purchase provisions but can use supplies that they’ve acquired from different other methods (e.g., as bonus at the beginning of some scenarios).

Mobilization Conditions

Armies are expensive and take long to come into action. Players can only mobilize in one of the four situations below:

a) At the beginning of the phase

Some factions are entitled to mobilize at the beginning of an expedition phase.

During the **first** expedition phase, the faction that plays first is determined by the scenario (See “Scenarios” above).

During subsequent expedition phases:

- If the exiled claimant **has not given hostages** to the de Clare, they play first. This player always mobilizes in Kilmacduagh with 10 battles and 10 provisions.

- If the exiled claimant **has given hostages** to the de Clare, de Clare plays first.

b) When a Base is Attacked

A faction can mobilize in case another faction attacks their *longport*. In order to do so, they must win a disengagement dice roll against the attacker (see “Combat” below).

Players who mobilize as such start with their army figure at their capital with only **one battle token**. They cannot recruit new soldiers.

c) When being Mobilized by Another Player

Clann Turlough, Clann Brian Roe and the Tanist have the power of inviting other factions to mobilize. See “Mobilizing Other Players” below.

d) When Receiving News of the War

Any faction can mobilize if they receive news of the war. “News” takes one round to reach Thomond’s boundaries. Thus, at the beginning of the second round any player which has not mobilized can still do so. This mobilization must be carried out following the turn order of the maintenance phase.

Once mobilized, players can perform up to five different actions in their turn with the following order:

- 1) Moving
- 2) Mobilizing other players
- 3) Fighting
- 4) Raiding
- 5) Provisioning

Except for provisioning, **none of the actions above is mandatory**. Players can decide whether they wish to perform them according to the game’s circumstances.

3.2. Moving

Marching allows players to move their army miniatures throughout the board. Each player can move up to **6 movement points** per turn.

Different hexes have distinct movement point costs:



If two tiles are connected by a route, moving between them costs **one movement point**.



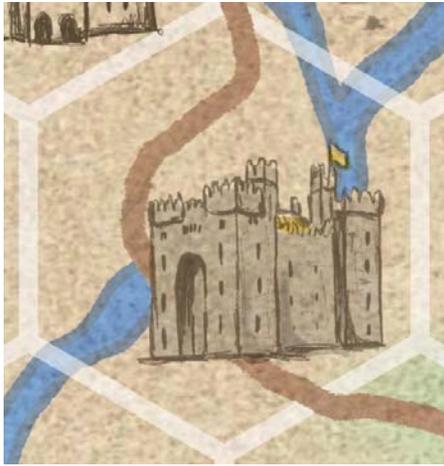
If they are not connected, marching costs **two movement points**.



If they are separated by a water course, **it is not possible to move** between them.



Exceptions are river crossings, represented as routes passing through water courses.



Castles inflict attrition on moving parties belonging to a rival coalition. Armies that do not belong to the coalition of the castle owner lose 1 provision and 1 cattle tokens.

When a player's movement points are depleted, they cannot abandon the tile they are in until the end of the turn.

When entering combat, the player loses all their remaining movement points (see "Fighting" below).

3.3. Mobilizing Other Factions

Clann Turlough, Clann Brian Roe and the Tanist can mobilize other players during their turn.

Mobilizing a Lesser King

In order to mobilize a **lesser king**, the player controlling one of the factions above needs to move to said king's *longport* and declare the intention of mobilizing them.

Independent and non-aligned **vassal** kings will become allies when first approached with an invitation to mobilize.

Allies of an opposite coalition can also be approached with an invitation to mobilize. In this case, they will instead give a **hostage** to player who mobilized them.

Giving a hostage is an assurance that the faction in question will not mobilize in favor of their faction leader. However, the player controlling the allies of either claimant may decide to mobilize them anyway. If they do this, the hostages are killed and the ties among the players end. This action costs a *febas* point.

Mobilizing de Clare

A claimant with no existing bounds with the de Clares can attempt to mobilize them. In order to do so, they need to move to Bunratty castle (southernmost part of the map) and offer **hostages** to de Clare.

De Clare may accept or refuse mobilization without any consequences.

Mobilizing an Exiled Claimant

De Clare has the special power of mobilizing an exiled claimant. For such, he needs to move to Clonroad and declare his intention. The claimant joins the game with an army unit on that very hex.

3.4. Entering combat

Whenever an army enters a hex harboring an enemy army, they shall declare combat. In order to do so, they pick an enemy army on the target hex which they would like to fight with.

When declaring combat, the player waives all their remaining movement points.

Every combat has an attacker and defender coalition. An army is part of an attacking coalition if it enters a hex where there's an enemy army already and is part of the defending coalition if it occupies the tile first.

Player battles comprising each coalition are summed up when calculating attack rolls.

Attack Roll

To perform combat, a member of each coalition rolls a dice and add (or subtracts) any terrain modifier to it. The coalition with the highest number wins the attack roll.

Losing an attack roll costs the player **1 battle**.

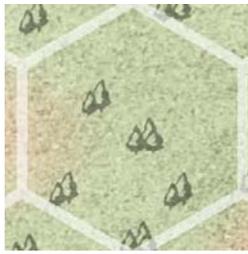
If the combat defeat leaves a player with 0 battles, their army is removed from combat and they **lose two febas points**. If a coalition eliminates a claimant this way, each of its members **wins a febas point**.

If all members of a coalition are eliminated in combat, they lose their cattle tokens. They are distributed among the winning coalition members.

Terrain Penalties

Certain terrain types modify attackers or defenders' rolls. These effects are **cumulative**: a house which has more than one terrain type will elicit more than one effect over combat.

Terrain type	Attacker	Defender
---------------------	-----------------	-----------------



Woodland

–

+1



Bog

-1

- 1



River crossing

–

+1



Castle

–

+1

Disengagement

If a player is attacked by an opponent but they wish not to fight, they can try escaping from combat. In order to do so, they need to perform a disengagement roll.

Disengagements perform exactly as combat rolls. The only difference is that both attackers and defenders **roll only one die**, regardless of their army size.

If the defender succeeds, they can move the army unit to any adjacent house to theirs which can harbor it. If they are defeated, they **lose 1 battle**.

Successful disengagement rolls do not affect the attacker's armies.

Terrain penalties apply normally to this roll type.

End of Combat

The combat phase represents the first contact between armies, not necessarily a fight to the death.

If, by the end of that phase, the engaged armies still have battles left, they fight to the end in the battle stage (see “4.1 Fighting” below).

3.5. Raiding

Whenever a player enters a tile with a settlement, they can raid it. With this, they win a **cattle token**, but add **one devastation token to the settlement for each battle token** the player has.

Monasteries and *longphoirt* can be raided without repercussions. Castles, on the other hand, cannot be raided unless the attacker **makes a combat roll**, as if the castle was an enemy army (see 3.4. “Entering Combat”, above). If the castle “wins”, the attacker loses a battle token and is prevented from raiding. If the castles “lose”, it suffers the effects of raiding as if it was a monastery or *longport*.

A settlement can only be raided by a player once per turn.

Destroyed settlements cannot be raided.

Raiding settlements belonging to one’s own coalition **costs a *febas* point**.

Battle Phase

The battle phase is a continuation of the expedition phase in which battle results are calculated.

It is comprised of two stages:

4.1. Fighting

If two or more armies have finished the expedition phase in combat (i.e., on the same house as an enemy coalition army), they perform combat rolls until one of the coalitions loses all battles.

If more than two armies are in combat, players of a same coalition decide who rolls the dice at each rolling.

Players eliminated in this stage **lose two *febas* points**. If a coalition eliminates a claimant this way, each of its members **wins one *febas* point**.

If, by the end of this stage, there are no mobilized armies remaining on the board, the match proceeds to the next round.

4.2. Provisioning

When armies have depleted their movement points and there are no more ongoing battles, players must provision their battles.

There are two ways to do this:

With provision/cattle tokens: each battle token “costs” one supply or cattle to be fed.

With *coyne*: armies which do not receive supplies will look for food and supplies on their own. This practice adds one devastation token to the settlement where the player is for each battle token they have.

Coyne can only be used in settlements belonging to the player’s coalition. In case the player ends the turn on a house without settlements or on an enemy settlement, the only way of provisioning their armies is with provision/cattle tokens.

Coyne cannot be performed in settlements which were already destroyed. By the same logic, if provisioning an army by *coyne* threatens to increase a settlement’s devastation above 10, it is increased only to 10, the settlement is destroyed (i.e., its devastation tokens are flipped) and the player **supplies only the battles fed up to that point**.

Example: *Brian Roe has 5 battle tokens, but the monastery where he ended the turn already has 6 devastation tokens. He adds one devastation to the settlement for each one of his battles until reaching number four, resulting in the settlement completing 10 devastation tokens. He flips the tokens, destroying the monastery, and disposes of his remaining battles.*

If a player has insufficient resources to supply their army, they lose one battle for each battle token they fail to feed.

Example 2: *Turlough has 6 battle tokens, but only 4 cattle tokens. He supplies 4 of his battles and loses the other two.*

If a player loses all their battles due to lack of supplies, his/her army is eliminated from the game and they lose **two *febas* points**.

End of the Battle Phase

If by the end of this phase there no more mobilized armies, the match proceeds to the following round’s pre-maintenance phase.

If, conversely, there are still mobilized armies, the match returns to the **expedition phase**.

Exile

Luck is a fickle mistress. If a claimant deems they cannot win the war, they may run away to fight another day.

A claimant can exile himself at any moment of the expedition or battle phases. Doing so **costs one *febas* point**.

A player who chooses to do so starts the next round exiled.

Defeat Conditions

A player is eliminated from the game if **their *febas* points reach zero**.

If a claimant is eliminated this way, the game ends and the rival coalition is deemed victorious.

The table below summarizes all conditions to win and lose *febas* points.

Febas Points – Summary

Condition	Win/Loss
Reach phase 2.1. “Replenish Cattle” with 10 cattle tokens	+ 1 <i>febas</i>
Eliminate a rival claimant in combat	+1 <i>febas</i>
Plunder a settlement belonging to one’s own coalition	- 1 <i>febas</i>
Sacrificing a hostage	- 1 <i>febas</i>
Exile during expedition or battle phases	- 1 <i>febas</i>
Eliminated in combat	- 2 <i>febas</i>

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