Language, literacy, and cultural development in early medieval England and Ireland

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Introduction

There is a striking difference in the relative roles of vernacular literacy in early medieval England and Ireland. To judge from the distribution of texts that have survived from both areas[1] Latin was, in England, the dominant language of literacy and written Old English had a circumscribed role, whereas in Ireland the vernacular became an increasingly important language of literacy across a wide range of applications from the later seventh century onwards. The language of religion and the language of the people were, therefore, broadly different in Anglo-Saxon England in the sense that the primary language of the Christian establishment was Latin, but in Ireland Latin had to share its status as the language of religion with the vernacular. The aim of this paper is to suggest how this situation came about, and to attempt to assess its implications for cultural development in these areas.

1. The vernacular and the Christian establishment in early medieval England and Ireland

Throughout early medieval Western Europe, including England and Ireland, the default language of Christian ecclesiastical literacy was Latin. In England, the vernacular was used as a literary language for communication of Christian ideology to the laity, and was used for other purposes, albeit reluctantly, only when the Viking raids of the late 8th century onwards had severely compromised the educational institutions on which the Church's Latin literacy was based. In Ireland, however, a wide range of texts which, elsewhere in Europe, would have been written in Latin, if at all, were written in the vernacular; these included such texts as secular laws, annals, genealogies, dynastic and world histories.

[1] BAUMGARTEN, R.: Bibliography of Irish linguistics and literature 1942–1971, Dublin 1986; BEST, R. I: Bibliography of Irish philology and of printed Irish literature, 2 vols., Dublin 1913–1942; CAMERON, A.: A List of Old English Texts, in: FRANK, R./CAMERON, A. (Eds.): Plan for the Dictionary of Old English, Toronto 1973, pp. 25–306; ESPOSITO, M.: Latin learning in mediaeval Ireland, ed. by M. LAPIDGE, London 1988; KENNEY, J.: Sources for the early history of Ireland: ecclesiastical, New York 1929; KERR, N. R.: Catalogue of Manuscripts containing Anglo-Saxon, Oxford 1957; LAPIDGE, M./SHARPE, R.: A bibliography of Celtic-Latin literature 400–1200, Dublin 1985; LAPIDGE, M./GNEUSS, H. (Eds.): Learning and Literature in Anglo-Saxon England, Cambridge 1985; RICHTER, M.: Ireland and Her Neighbours in the Seventh Century, Dublin 1999; SHARPE, R.: A handlist of the Latin writers of Great Britain and Ireland before 1540 (Publications of the Journal of Medieval Latin 1), Turnhout 1997.

One plausible explanation for this situation was the degree to which pre-Christian priesthoods that maintained orally -transmitted cultural knowledge in the vernacular survived in post-Conversion England and Ireland.

- In pre-Christian Ireland, the druidical order maintained a broad range of cultural knowledge, the main aspects of which were mythology, national and dynastic history, and law[2]. By virtue of this knowledge, the order was politically and socially influential. Its members were, for example, typically attached to royal courts, where they serviced the cult of sacral kingship, influenced the king's conduct by prophetic and magical powers, advised the king on his legal affairs, and maintained and publicized the history of the dynasty to which the king belonged.

  The druidical order survived the Christian conversion largely intact, having lost its sacral functions but retaining the rest. A key development in the early Christian centuries was the rise of a learned élite that was an amalgam of the Christianized druidical order and Christian monastic culture[3].

- The Anglo-Saxons, like the Germanic peoples of western Europe more generally, are also known to have had priesthoods with pretty much the same functions as the druids, but the evidence for them is much sparser than for the Irish, and one gets the impression that they were not as politically and socially entrenched as their Irish counterparts. The prime examples here are Bede's account of the priest Coifi at the court of Edwin of Northumbria in the mid-seventh century[4] and Eddius' reference to the pagan priests in seventh-century Sussex[5]; the few other examples come from different times and places in the Germanic world in, for example, Tacitus' *Germania*[6], Jordanes' *Getica*[7], and Willibald's *Life of St. Boniface*[8]. What is certain is that, throughout Germanic Western Europe, these priesthoods were gradually supplanted by the Christian ecclesiastical establishment. In some areas at least, court poets whose main role was the maintenance of royal dynastic tradition survived,

[2] MOISL, H.: Lordship and tradition in barbarian Europe, Lewiston 1999.
[3] McCONE, K.: Pagan past and Christian present in early Irish literature (Maynooth Monographs 3), Maynooth 1990.
[4] COLGRAVE, B. / MYNORS, R. A. B. (Eds.): Bede's Ecclesiastical History of the English People, Oxford 1969, II/13.
[5] COLGRAVE, B. (Ed.): The Life of Bishop Wilfrid by Eddius Stephanus, Cambridge 1927, p. 26–28.
[6] MUCH, R.: Die Germania des Tacitus, Heidelberg 31967, ch. 11–12.
[7] MOMMSEN, T. (Ed.): Iordanis Romana et Getica, (MGH AA 5/1), Berlin 1882, p. 73.
[8] LEVISON, W. (Ed): Vitae Sancti Bonifatii archiepiscopi moguntini, (MGH Scriptores rerum germanicorum 57), Hannover 1905, ch. 6.

but as a group these remained secular. Unlike in Ireland, therefore, there was no general amalgamation of pre-Christian and Christian orders[9].

The proposed explanation for the difference in dominant literacies in England and Ireland is therefore that, in Ireland, the learned élite used ecclesiastical literacy to commit its traditional learning to writing in the vernacular, whereas in England there was no motivation for the Christian establishment to do so.

2. **Cultural implications of the differential status of the vernacular in early medieval England and Ireland**

The cultural implications of the relative status of Latin and the vernacular as a literary language in England and Ireland will be assessed in terms of the claim that the language which a population group uses significantly affects the way it conceptualizes the world, and consequently its cultural development. This implies that the Anglo-Saxon Church, whose primary language was Latin, conceptualized the world differently from the Irish hybrid learned élite whose primary language was the vernacular. As a result, Anglo-Saxon cultural development can be expected to have converged on institutions for which expressions exist in Latin, while Irish cultural development can be expected to have converged on traditional institutions articulated by the vernacular.

The remainder of this section is in two parts. The first part develops the argument using ideas about linguistic communication from contemporary cognitive science, and the second applies these ideas to a specific example.

a) Linguistic communication

In the Western tradition, the study of the human mind is continuously documented from classical antiquity, but it is with the emergence of cognitive science in the second half of the twentieth century that major advances have been and continue to be made. Cognitive science is a general term used to describe a range of disciplines concerned with understanding the mind and its implementation in the brain, including subdisciplines of philosophy, psychology, linguistics, computer science, and neuroscience[10]. In what follows, we look at ideas from cognitive science about linguistic communication for spoken and written language separately.

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[9] RICHTER, M.: The Formation of the Medieval West, Dublin 1994; MOISL 1999.

[10] WILSON, R. / KEIL, F. (Eds.): The MIT encyclopedia of the cognitive sciences (MITECS), London 2001.

i. *Spoken communication*

Because language is one of the main cognitive functions that distinguish humans from animals, the relationship between thought and language has been a long-standing issue in the study of the mind, and remains so in contemporary cognitive science[11]. The central question is whether or not thought and language are independent: is language a necessary component in the mechanism of thought, or is it just a way of encoding and communicating the individual's independently-formulated thoughts to the world, and of decoding the linguistically-encoded, independently-formulated thoughts of others? For ease of reference, these alternatives will be referred to as the cognitive and the communicative views, respectively, of the relationship between thought and language[12].

Proponents of the cognitive view have included Wilhelm von Humboldt[13], Vygotsky[14], Wittgenstein[15], and Daniel Dennett[16]. The idea that thought and language are causally interrelated is, however, primarily associated with the American linguists Edward Sapir and his pupil Benjamin Whorf, whose stance on this idea is best summed up by a much-cited quotation from Whorf[17]:

> "We dissect nature along lines laid down by our native languages. The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary, the world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds - and this means largely by the linguistic systems in our minds. We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way - an agreement that holds throughout our speech community and is codified in the patterns of our language. The agreement is, of course, an implicit and unstated one, but its terms are absolutely obligatory; we cannot talk at all except by subscribing to the organization and classification of data which the agreement decrees."

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[11] PINKER, S.: The language instinct: the new science of language and mind, London 1994; CARRUTHERS, P.: Language, Thought, and Consciousness: An Essay in Philosophical Psychology, Cambridge 1996.
[12] CARRUTHERS 1996.
[13] BROWN, R.: Wilhelm von Humboldt's conception of linguistic relativity, Paris 1968.
[14] KOZULIN, A. (trans.): Thought and language / Lev Vygotsky , Cambridge, Mass:MIT Press 1986.
[15] WITTGENSTEIN, L.: Tractatus logico-philosophicus, London 1922; WITTGENSTEIN, L.: Philosophical investigations, Oxford 1953.
[16] DENNETT, D.: Consciousness explained, Boston 1991.
[17] WHORF, B.: 'Science and Linguistics', in: Technology Review 42/6 (1940), pp. 229–231, 247–248.

On the basis of this and other passages in the various writings of Sapir and Whorf[18] , the linguistics research community has constructed the Sapir-Whorf hypothesis, which proposes two associated principles:

- linguistic determinism, whereby thinking is determined by language – the language that a person speaks determines the way he or she interprets the world.
- linguistic relativity, whereby people who speak different languages perceive and think about the world differently.

The communicative view – that language is purely a mechanism for the communication of independently-existing thought – was held by, among others, John Locke[19] and Bertrand Russell[20], and has been standard in cognitive science in the second half of the twentieth century, an accessible account of which is given in Pinker[21]. It is based on the computational model of the mind; because the remainder of the discussion presupposes understanding of that model, its essentials are briefly presented here.

In the early part of the 20th century, mathematicians were interested in the question of computability – whether all conceivable mathematical functions could be solved, and, if not, which ones could be. This rather abstruse research question became very relevant to real-world concerns during the Second World War, when the developing theory of computation was successfully applied to breaking German secret codes, thereby contributing greatly to the Allied victory. Alan Turing was one of the mathematicians interested in computability, and was involved in the team that broke the German codes using the world's first computer[22]. His formulation of what a computer is underlies present-day computer science and technology as well as the computational model of mind, and is called the 'Turing Machine'. Its fundamental concepts are[23] :

- Symbols and symbol systems: a symbol is any physical thing that represents – in other words, that humans agree to interpret as standing for something else: a flag with stars and

[18] CARROLL, J. (Ed.): Language, thought, and reality: Selected writings of Benjamin Lee Whorf, Cambridge Mass. 1967.
[19] LOCKE, J.: An Essay concerning human understanding, London 1690.
[20] RUSSELL, B.: The analysis of mind, London 1921.
[21] PINKER 1994.
[22] HODGES, A: Alan Turing: The Enigma, New York 2000.

[23] HAUGELAND, J: Artificial intelligence: The very idea, Cambridge Mass. 1985; HOPCROFT, J. / MOTWANI, R. / ULLMAN, J.: Introduction to automata theory, languages, and computation, Harlow ²2000.

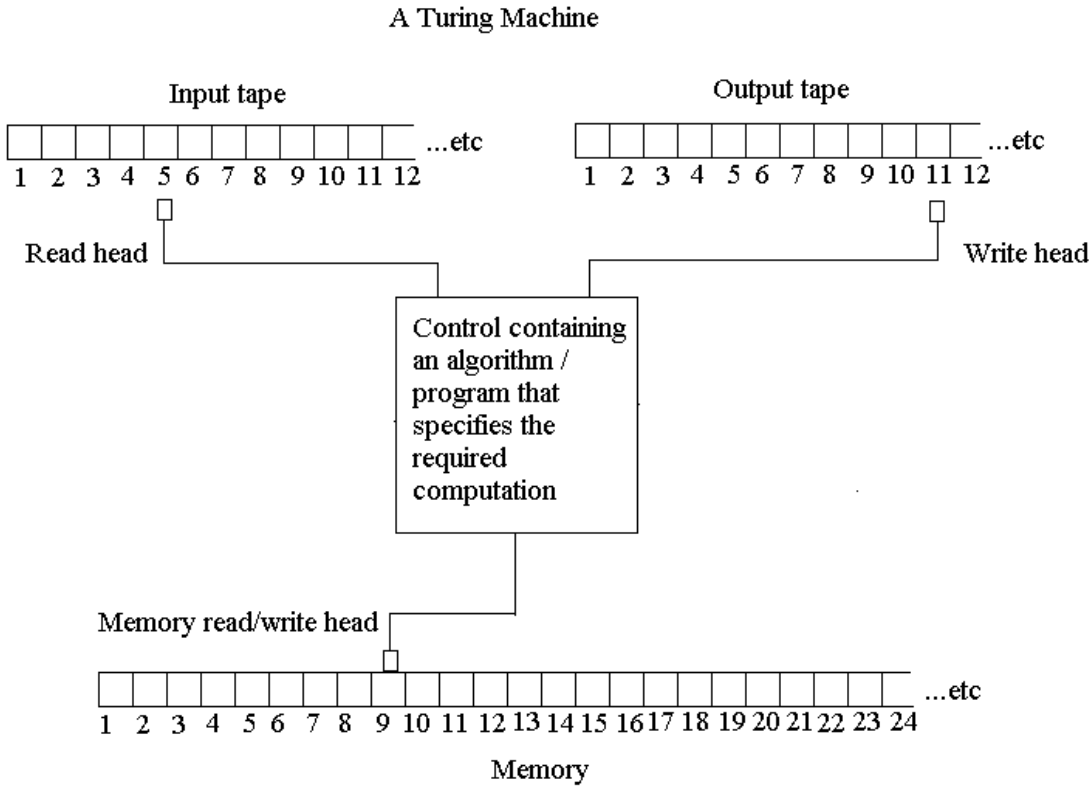
stripes is universally recognized as a symbol for the USA. A symbol system is a collection of related symbols, like the flags of the world's countries, or the letters of the western alphabet, which are symbols that represent the phonemes of a language.

- Strings: a string is a sequence of symbols taken from a symbol system. Using the alphabet as an example, the following are strings: *aaabbb, xdghjfdsahjll, computer*.

- Algorithms: an algorithm is a sequence of instructions which, if followed, is guaranteed to result in some desired state of affairs. A cooking recipe is an example of an algorithm, as are computer programs.

- Computation: computation on Turing's model is string transformation. Specifically, given some string S1, a computer is used to transform that string into S2. For example, a computer would transform the string S1 = *(2 x 2) / 3* into the string S2 = *1.333*, or the string S1 = *the red book* into S2 = *das rote Buch*. How does a computer know what to transform a given string S1 into? It follows an algorithm.

A Turing machine can be visualized like this:



S1, the string to be transformed, is called the 'input string', and is written onto the input tape, one symbol per square; note that the input tape can be as long as required. The transformed string S2 will appear on the output tape, also one symbol per square, and as long as needed. The transformation is accomplished by the control mechanism, which contains an algorithm to accomplish the transformation. These instructions tell the control mechanism when and what to read from the input, when and what to write to the output, and how to use the memory for intermediate calculations; the memory is just a place for 'rough work' such as humans use when doing calculations. The algorithm in the control part of the machine is called a 'program'.

Turing himself proposed that the human mind was a computer[24]. This suggestion was enthusiastically taken up by the nascent cognitive science of the 1950s and has been dominant ever since, as noted.

The philosopher Jerry Fodor has been highly influential in computational cognitive science[25]. Two of his most important contributions to it have been:

- Modularity: the mind is not a single computer with a hugely complex program in the control mechanism determining all aspects of cognition, but an interconnected and communicating collection of computers, each responsible for a specific cognitive function such as vision, logic, or language. Each module contains a computer with a program that carries out the function for which it is responsible, getting its input from the external environment or other modules, and communicating its output to other modules.

- Language of thought: The symbols used by central cognitive modules such as those for memory and logic are different from those used by the peripheral input/output modules like audition and vision; the symbols in central cognition constitute a language that has come to be known as 'mentalese'. Each of the input / output computational systems translates the symbols that it uses into and out of mentalese when communicating with central systems.

Modularity and mentalese are what underlies the current standard view in cognitive science that thought is independent of language. Thinking is what happens in mentalese in the central modules; the language module translates strings of mentalese into natural language strings that are

[24] TURING, A.: Computing machinery and intelligence, in: Mind 49 (1950), pp. 433–460.

[25] FODOR, J.: The language of thought, New York 1975; FODOR, J.: The modularity of mind, Cambridge Mass. 1983; FODOR, J.: The elm and the expert: mentalese and its semantics, Cambridge Mass. 1995; FODOR, J.: The mind doesn't work that way: The scope and limits of computational psychology, Cambridge Mass. 2001.

communicated to the environment via speech, and natural language strings from the environment into mentalese.

The standard communicative view of the relationship between thought and language is now being challenged, most recently by Dennet[26] and Carruthers[27]. Both argue that the cognitive view is no less inherently plausible than the communicative one, and that, like the latter, it has substantial empirical support. Carruthers goes on to propose that language is only involved in a specific type of thought – conscious thought. This, of course, begs the question of what a conscious thought might be, but a rough approximation is that it includes the traditionally 'higher' functions like reasoning, planning, and memory, and excludes 'lower' ones like perceptual and motor functions. On this view, framing a coherent argument on some subject is not a matter of thinking about it in mentalese and then translating and transmitting it in, say, English, but involves the use of English sentences in formulating the argument. In other words, such thinking is done in or, more cautiously, in a way involving English.

Carruthers's argument is far from conclusive and requires extensive theoretical and empirical development, as he himself is at pains to point out. At the very least, however, his argument is persuasive to the extent that it rehabilitates the cognitive view as a reasonable hypothesis about the relationship between thought and language.

ii. *Written communication*

One of the features of the standard computational model of mind is that it operates on mental representations of the external world. The basic idea here is that

- the input modules translate physical stimuli from the environment into symbolic representations of the external world.
- these representations are sent to the relevant central cognitive modules, where they are stored as symbolic mentalese sequences in their memories.
- the central modules operate algorithmically on these sequences, thereby generating thought.
- where appropriate, the results from these central operations are sent to output modules which translate them into physical action that can affect the real-world environment, such as speech or movement.

In this way, the cognitive agent perceives and acts in the world.

[26] DENNET 1991.
[27] CARRUTHERS 1996.

While the above mechanism seems plausible enough in theory, it was found to be unworkable in practice. During its heyday in the 1970s and 1980s, the discipline of artificial intelligence attempted to use cognitive theory as the blueprint for design and construction of physical systems that emulate human cognition, or at least aspects of it. Hopes were high, but hardly any were realized, and many researchers now see little prospect of developing artificially intelligent devices on the basis of standard computational cognitive theory[28] . The problem is that maintaining an up-to-date symbolic representation of the world appears to be an insuperable task. One problem is computational load. Any cognitive agent, animal as well as human, has to survive in an environment that is constantly in flux, which means that the content of the central module memories has to be constantly updated; as the agent grows older, the quantity of stored representation grows, and with it the computational effort of updating it. At present, not even the fastest computer has come anywhere near human levels of response to the environment. One might, of course, argue that the fastest computers are simply not fast enough, but that they will be one day. There is, however, an even more serious problem: relevance. What is stored in memory is not simply sense impressions – how the world looks, smells, and feels at any given moment. Rather, knowledge is stored, that is, causal sequences that have been experienced: if there are heavy clouds, it will probably rain; if there is a car coming towards me I had better move or I will suffer and die; and so on. But this stored knowledge has to be updated in response to current sensory input if an up-to-date representation of the world is to be maintained, which means that the relevance of each sensory input to the existing knowledge base has to be assessed and changes made where necessary. But assessing relevance is easier said than done. Let's say I read that average rainfall worldwide has decreased by 18% over the past decade. What is the relevance of this to everything I know? Is it relevant to what I think I know about global warming? Probably. Is it relevant to what I know about the properties of glass? Probably not. Is it relevant to what my cat eats for dinner? Possibly. And what about all the other things I know? Without going into technicalities, it is not difficult to appreciate the complexity of what is involved here, and many believe that this complexity will always defeat attempts to maintain an up-to-date representation of the world in a computational system.

To address this problem, a new line of thought in cognitive science has developed a way radically to decrease the computational load associated with maintaining an up-to-date symbolic representation of the world by means of a commensurate radical decrease in how much of the world needs to be represented in the mind. This is accomplished by a reconceptualization of the

[28] For example DORFFNER, G.: Neural networks and a new artificial intelligence, London 1997.

relationship between the mind and its environment. The standard cognitive model described above makes a clear distinction between the abstract, non-physical, computational mind and the physical world in which it exists. This distinction is in direct line of descent from the dualism of Descartes and, ultimately, of Plato, which has generated the mind/body problem, and whose long-running resistance to philosophical resolution is a good sign that it was misconceived in the first place. Replacing it is a view of cognition, known as 'situated' or 'embedded' cognition[29] , in which the rigid ontological distinction between mind and physical world is broken down: mind, body, and environment are seen as a single, tightly-coupled system in constant, complex, dynamic interaction. The mind is primarily a mechanism that directly controls the body in its environment without necessary recourse to symbolic representation; computation on symbolic representations remains an aspect of cognition, but not the totality of it as in the standard model – in Carruthers's terms, that aspect would be coterminous with conscious thought. Because a large part of cognition is thereby accomplished without symbolic representation, the computational model of mind is rescued from implausibility.

Now, one of the implications of this revised computational model of mind is that the environment is not the object of cognition, but an intrinsic part of it. How the environment is structured determines how the body can relate to it, and this in turn constrains how the mind can control the body in its environment. This process is, however, not purely reactive. Far more than any other animal, humans shape their environment; once the environment is altered, the possibilities for subsequent cognitive action within it change. And so on throughout the individual's life. Over time and across societies, such cognitive activity generates human culture.

How does all this relate to written communication? To say that the dynamic structuring of the environment is part of the cognitive process is to say that each human uses environmental structures in the course of cognitive activity. Use of such structures not only reduces the computational load on the representational aspect of the mind, but actually augments cognitive capacity. To see this, take an example from Clark 1996:

> "Most of us can answer simple questions like 7 x 7 at a glance […] But longer multiplications present a different kind of problem. Asked to multiply 7554 x 4567 most of us resort to pen

[29] VARELA, F./THOMPSON, E./ROSCH, E.: The embodied mind. Cognitive science and human experience, London 1992; CLARK, A.: Being there: putting brain, body, and world together again, Cambridge Mass. 1997; KIRSHNER, D. / WHITSON, J.(Eds.): Situated cognition: social, semiotic, and psychological perspectives, London 1997.

and paper. What we achieve with pen and paper is a reduction of the complex problem to a sequence of simpler problems beginning with 7 x 4. We use the external medium (paper) to store the results of these simple problems, and by an interrelated series of simple pattern completions coupled with external storage we arrive at a solution."

Restructuring of the environment, that is, putting physical marks on the piece of paper, allows a problem that the representational component of the integrated mind / body / environment system cannot solve on its own: the external environment extends its capabilities. Writing fulfils a function analogous to that of this arithmetical example. How much of a spoken lecture on some technical subject can a human remember verbatim? Judging from personal experience, very little. What about the gist of the lecture, that is, its propositional content? Rather more. How accurately? Again from personal experience, not very. How long does such memory last? The simple fact is that human memories are very limited in terms both of capacity and of accuracy of recall. What writing offers is a way of extending that capacity essentially without limit because it allows arbitrary amounts of linguistically encoded knowledge to be stored in the physical environment to an arbitrary degree of accuracy for as long as necessary; whenever some knowledge is required, it is only necessary to read the relevant book. Writing is, in other words, a hugely powerful way of using the external environment to augment human cognitive capacity because it provides a creature with very limited memory with an essentially unlimited one.

iii. *Evaluation*

We have looked at two ideas from cognitive science to support the claim that the language which a population group uses significantly affects the way it conceptualizes the world, and consequently its cultural development:

- That language and thought are interdependent
- That written language extends cognitive capacity by providing it with an essentially unlimited memory

The degree to which these support the claim depends crucially on how one sees the nature of the interdependence between language and thought. At one extreme is the standard view that there is no interdependence: the claim is simply wrong, and there is nothing more to say. At the other is the Sapir-Whorf hypothesis, in which case the claim amounts to this: written language makes permanent the interpretation of the world characteristic of a given language L, and that

interpretation thereby affects the culture in which L is embedded over more or less arbitrary lengths of time.

One might object that both the ideas from cognitive science are hypothetical, and that any claim based on them must therefore also be hypothetical. This is true, but it cannot be a criticism. All one has in history, as in science generally, are hypotheses whose usefulness is judged on the degree to which they are supported by empirical evidence[30]. It is to such empirical evidence that we now turn.

b) Application

The claim that the language which a population group uses significantly affects the way it conceptualizes the world, and consequently its cultural development, predicts that early medieval England and Ireland developed differently because their primary languages of literacy were different. The evidence used to support this prediction is the way in which the early medieval western Church's theory of Christian kingship transformed Anglo-Saxon lordship, but failed to do so in Ireland.

i. *The early medieval theory of Christian lordship*

The growth of the Church in and later beyond the confines of the old Roman Empire in late antiquity and the early Middle Ages was accompanied by the formulation of a political theory founded on Christian principles[31] . Based on St. Paul's ideas on the relationship between secular and divine authority, the popes Leo I (440–461) and Gelasius (492–496) synthesized a set of principles according to which secular lordship was regarded as an office within the politically-conceived body of the faithful which God has instituted for the enforcement of His law in the world, and whose functions could legitimately be influenced by the ecclesiastical hierarchy that stood between the ruler and the source of his power in God. In its fullest form, this theory was captured by the motto *rex Dei gratia*.

ii. *The dissemination of the theory of Christian lordship in early medieval western Europe*

In the West the collapse of the Empire meant that the Church was faced with the very real power of barbarian kings ruling newly conquered territories as personal kingdoms, and it was on their patronage that it depended for its continued survival and expansion. The development of a

[30] CHALMERS, A: What is this thing called science?, Indianapolis [3]2002.

[31] ULLMANN, W.: Medieval political thought, Harmondsworth 1975; McDONALD, L.: Western political theory, part 1: Ancient and medieval, London 1997.

Christian theory of kingship represents an attempt to harness that royal power. Its dissemination in early medieval continental Europe is documented by Ewig[32]. By the early eighth century it had found its way to Anglo-Saxon England – Bede refers to it[33] – and to Ireland, where it appears in texts like Adomnán's *Life of Columba*[34], the *Collectio Canonum Hibernensis*[35], and *De Duodecim Abusivis Saeculi*[36].

iii. *The effects of the theory of Christian lordship in early medieval England and Ireland*

The mere formulation of the theory of Christian kingship could not automatically be expected to condition the adherence of kings to their unilaterally assigned role, but that the ploy worked is attested not only for medieval and early modern Europe but even – in Britain – to the present day. Its crucial success came with Charlemagne's acclamation as emperor: it represents a full acceptance of the Church's political programme, and with it a rejection of the earlier Germanic ideas of kingship. This happened also in Anglo-Saxon England, where it is seen most clearly in the coronation of Edgar by the Archbishop of Canterbury in 973[37]. There is, however, no indication that the theory of Christian kingship, though known by the Irish Church, was ever adopted in the English and Frankish sense. Just the opposite, in fact: compare Edgar's coronation with Giraldus Cambrensis' late twelfth-century account of a royal inauguration in Ulster[38] , a ceremony deeply embedded in the totemism of pre-Christian kingship mythology[39].

iv. *Interpretation*

Seen in terms of the Sapir-Whorf hypothesis and of situated cognition, the difference in the effect of the theory of Christian kingship in early medieval England and Ireland is a consequence of the difference in their languages of literacy. In England, as in continental Europe, the language of literacy was overwhelmingly Latin, and the Church was consequently predisposed to think in terms of linguistically-expressed categories characteristic of Rome in Late Antiquity. In Ireland, however, law tracts that were based on the teaching of the preliterate druidical schools and that explicitly

[32] EWIG, E.: Zum christlichen Königsgedanken im Frühmittelalter, in: Das Königtum. Seine geistigen und rechtlichen Grundlagen, (Vorträge und Forschungen 3), Lindau/Konstanz 1954.
[33] COLGRAVE / MYNORS 1969, I/32.
[34] ANDERSON, A. O. / ANDERSON, M. O. (Eds.): Adomnan's Life of Columba, London 1961, pp. 200, 236, 280.
[35] WASSERSCHLEBEN H. (Ed): Die irische Kanonensammlung, Leipzig ²1885, , chs. 24, 25.
[36] HELLMANN, S. (Ed.): Pseudo-Cyprianus, De XII Abusivis Saeculi, in: Texte und Untersuchungen zur Geschichte der altchristlichen Literatur 34 (1910), pp. 44-5.

[37] SAWYER, P. H.: From Roman Britain to Norman England, London ²1998, p. 184.
[38] O'MEARA, J. (Trans.): Gerald of Wales, The History and Topography of Ireland, Harmondsworth 1983, pp. 93–94.
[39] BYRNE, F. J.: Irish kings and high kings, London 1973, pp. 17-18.

articulated the ideology and structures of lordship, as well as royal dynastic genealogies and histories which exemplified these things[40], were written in the vernacular, and thus defined a thought-world that the Irish Church and Irish society more generally accepted.

Conclusion

This discussion has been too brief for it to be conclusive or even convincing, but that was not the aim. The aim, rather, was to suggest a way in which current thinking in cognitive science might provide a theoretical framework for historiography of the early medieval period, at least with respect to the particular topic in question here. Much of the work in early medieval history is descriptive – essentially, it attempts to reconstruct what happened in the past as reliably as possible. What cognitive science offers is a theoretical framework, using principles of human cognition to explain why what happened did happen.

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DENNETT, D.: Consciousness explained, Boston 1991.
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