

Time and Stone

**The Emergence and Development of Megaliths
and Megalithic Societies in Europe**

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ARCHAEOPRESS ARCHAEOLOGY

ARCHAEOPRESS PUBLISHING LTD

Summertown Pavilion
18-24 Middle Way
Oxford OX2 7LG

www.archaeopress.com

ISBN 978 1 78491 685 5
ISBN 978 1 78491 686 2 (e-Pdf)

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Cover: Dolmen de la Carena, Cap de Creus

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Contents

Chapter 1 Megaliths and megalithic societies in Europe	1
Introduction and central research questions	1
Theories on the emergence and spreading of megaliths	2
Investigated megalithic regions	7
Chapter 2 Methodical Approach: Radiocarbon Dates and Bayesian Chronological Modelling	9
The radiocarbon dates	9
Composition of data	9
Classification of the contexts and data quality	10
Alternative dating approaches	12
The Bayesian approach	13
Chapter 3 Northwest France	19
Pre-megalithic structures and pre-megalithic funeral rites in Northwest France	19
Pre-megalithic structures in the Paris Basin/Northern France	19
Pre-megalithic structures in Brittany and on the Channel islands	30
Pre-megalithic structures in the Central West France	33
Transitional structures and the emergence of megaliths in Northwest France	34
The emergence of megaliths in the Paris Basin/Northern France	35
The emergence of megaliths in Brittany and the Channel Islands	36
The emergence of megaliths in Central West France	47
Appearance and architectonical features of megaliths in Northwest France	47
Megaliths in the Paris Basin/Northern France	47
Megaliths in Brittany and on the Channel Islands	48
Megaliths in Central West France	50
Megalithic structures with radiocarbon sequences and radiocarbon dates	51
Megaliths with radiocarbon results in the Paris Basin/Northern France	51
Megaliths with radiocarbon results in Brittany and on the Channel Islands	54
Radiocarbon Results for Human Bones from Megalithic Graves in Brittany	55
Multi-Phased Megalithic Structures in Brittany	57
Finistère	57
Morbhian	61
Channel Islands	68
Megaliths with radiocarbon determinations in Central West France	71
Dating the megaliths on the basis of the artifacts	81
The material in the early megaliths	81
The material in the passage graves	81
The material in the later megalithic grave forms	82
The burial rites of megalithic societies in Northwest France	83
Burial rites in the Paris Basin/Northern France	83
Burial rites in Brittany and on the Channel Islands	83
Burial rites in Central West France	85
Contemporaneous non-megalithic burials	87
Contemporaneous non-megalithic burials in the Paris Basin/Northern France	87
Dry Wall Structures	87
Wooden Gallery Graves	91
Pit Burials and Secondary Deposits or Ossuaries	92
Hypogea	93
Houses for the Dead	93
Burials in Rock Shelters	93
Contemporaneous non-megalithic burials in Brittany and on the Channel Islands	93
Contemporaneous non-megalithic burials in Central West France	94
Conclusion	94

Chapter 4 Catalonia	127
Pre-megalithic structures and pre-megalithic funeral rites in Catalonia.....	127
Transitional structures and the emergence of megaliths in Catalonia	127
Appearance and architectonical features of megalithic structures in Catalonia	129
Megalithic structures with radiocarbon sequences and radiocarbon dates.....	138
Dating the megaliths on the basis of the artifacts.....	139
The megalithic burial rites.....	141
Contemporaneous non-megalithic burials.....	141
Conclusion.....	142
Chapter 5 Southern France	151
Pre-megalithic structures and pre-megalithic funeral rites in Southern France	151
Transition to the megalithic structures and the emergence of megaliths	152
Appearance and architectonical features of megaliths in Southern France	155
Megalithic structures with radiocarbon sequences and radiocarbon dates	163
Dating the megaliths on the basis of the artifacts	164
Megalithic burial rites.....	166
Contemporaneous non-megalithic burials.....	167
Stone Cists	167
Hypogea	168
Natural Caves and Rock Shelters.....	169
Pit Burials.....	169
Conclusion.....	169
Chapter 6 Corsica	179
Pre-megalithic structures and pre-megalithic funeral rites on Corsica.....	179
Transitional structures and the emergence of megaliths on Corsica	181
Appearance and architectonical features of megalithic structures on Corsica	182
Megalithic structures with radiocarbon sequences and radiocarbon dates	187
Dating the megaliths on the basis of the artifacts	187
Megalithic burial rites.....	187
Contemporaneous non-megalithic burials.....	187
Conclusion.....	188
Chapter 7 Sardinia	191
Pre-megalithic structures and pre-megalithic funeral rites on Sardinia.....	191
Transitional structures and the emergence of megaliths on Sardinia	191
Appearance and architectonical features of megalithic structures on Sardinia	192
Megalithic structures with radiocarbon sequences and radiocarbon dates.....	197
Dating the megaliths on the basis of the artifacts.....	197
Megalithic burial rites.....	199
Contemporaneous non-megalithic burials.....	199
Conclusion.....	201
Chapter 8 The Maltese Archipelago	205
Pre-megalithic structures and pre-megalithic funeral rites on the Maltese Archipelago	205
Transitional structures and the emergence of megaliths on the Maltese archipelago	205
Appearance, architectonical features and function of the megalithic structures on the Maltese archipelago	206
Megalithic structures with sequences and with radiocarbon dates.....	212
Dating the megaliths on the basis of the artifacts.....	213
Contemporaneous burial rites	216
Conclusion.....	216
Chapter 9 Southern Spain	221
Pre-megalithic structures and pre-megalithic burial rites in Southern Spain.....	221
Transitional structures and the emergence of megaliths in Southern Spain	221
Appearance and architectonic features of megalithic structures in Southern Spain	222
Megalithic structures with sequences and with radiocarbon dates	227
Dating the megaliths on the basis of the artifacts.....	238
The megalithic burial rites.....	239

Contemporaneous non-megalithic burials.....	240
Conclusion.....	241
Chapter 10 West Iberian Peninsula.....	249
Pre-megalithic structures and pre-megalithic funeral rites	249
Transitional structures and the emergence of megaliths on the West Iberian Peninsula	250
Appearance and architectural features of megaliths on the West Iberian Peninsula	251
Megalithic graves in the southern regions: Estremadura, Alentejo, and Algarve.....	253
Megalithic graves in the northern regions: Beira, Northern Portugal, Galicia	255
Megalithic structures with radiocarbon sequences and with radiocarbon dates.....	262
Radiocarbon results from human bones in megalithic contexts.....	262
All available radiocarbon dates from megalithic contexts and the regional sequences	264
The Southern Regions	264
The Northern Regions	266
The Colour Sequence	270
Dating the megaliths on the basis of the artifacts.....	273
Megalithic burial rites.....	275
Contemporaneous non-megalithic burials.....	276
Caves and Rock Shelters.....	276
Hypogea/Rock-Cut Tombs	277
Conclusion.....	278
Chapter 11 The other megalithic regions in Northern Europe and in the Mediterranean	301
The Northern megalithic regions	301
Britain and Ireland	301
Belgium	304
Northern Germany, Netherlands	304
Scandinavia.....	306
The other Mediterranean megalithic regions.....	308
The Balearic Islands	308
Italian mainland and Sicily	309
Switzerland.....	310
Chapter 12 Synthesis: the emergence and spreading of megaliths and megalithic societies in Europe.....	311
Standing stones as the first megalithic monuments?.....	311
The very beginning: first monumental non-megalithic grave architecture	311
The emergence of megalithic graves in Europe	312
Convergence vs. transfer and possible transfer scenarios	314
Green stone as an economical factor: trade and prospection as a driving force for the transfer of the early megaliths.....	315
Rocks, forms, megalithic landscapes.....	318
Accessibility and change	321
Megaliths as a part of the memory and ritual culture of non-literate societies	326
The social, cultural, and biological conditions of memory.....	327
Stone and symbol	327
Stone and Ritual	328
Conclusion.....	329
Appendix 1 Oversight Graphic.....	331
Appendix 2 Glossary	333
Funeral architecture – inner structures	333
Funeral architecture – outer structures	334
Other megalithic structures.....	334
Non-megalithic contemporaneous burials.....	334
Appendix 3 Data.....	335
Bibliography	337

List of Figures

Figure 1.1 The megalithic regions in Europe and North Africa (after Camp 1961; Whitehouse 1981; Soulier 1998; Burl 2000; Kalb 2001; Malone 2001; Trump 2002; Sjögren 2003; Piccolo 2007; Scarre 2007; García Sanjuán 2009; Cicilloni 2010; Fritsch et al. 2010a; Leandri et al. 2014).....	2
Figure 1.2 Dolmens world-wide. Drawings from Montelius 1905 <i>Orientalien och Europa</i> . 1. India, p. 11, Figure 4; 2. Krim, p. 14, Figure 8; 3. Sudan, p. 16, Figure 9; 4. Portugal, p. 23, Figure 13; 5. Palestine, p. 13, Figure 6.....	4
Figure 1.3 The modified diffusionism of Gordon Childe in Europe and his successors. Passage graves are seen as derivations of Cretan passage graves (after Renfrew 1973: 46).....	5
Figure 1.4 Estimates for the start of construction of accessible megaliths from Müller (1998), based on the then available 606 radiocarbon results out of megalithic and long barrow contexts. The time intervals are showing the approximate modified values from sum calibrations (1-sigma ranges) for the earliest accessible megalithic architecture in the regions as dolmens and passage graves. The early results originate mostly from including too many terminus post quem values into the calculations.....	6
Figure 2.1 Number of radiocarbon dates considered in this volume obtained from different material types (n=2410).....	10
Figure 2.2 Number of radiocarbon dates from charcoal samples identified after wood species (n=102).....	10
Figure 2.3 The charcoal samples: classification of the contexts (n=944).....	10
Figure 2.4 Classification of the sample contexts.....	11
Figure 2.5 Simulation A by a process of back-calibration of calibrated dates for 25 radiocarbon determinations which actually date within 25 y from 4000–3976 BC.....	14
Figure 2.6 Sum calibration of simulation A. The bar marks the actual time span and shows that a sum calibration would extend the real time interval 4 times.....	15
Figure 2.7 Simulation B by a process of back-calibration of calibrated dates for 30 radiocarbon determinations which actually date within 300 y from 4100–3800 BC.....	16
Figure 2.8 Sum calibration of simulation B. The bar marks the actual time span and shows that a sum calibration would extend the real time interval by more than 50%.....	17
Figure 2.9 Sum calibration versus Bayesian statistical framework. The analysis of all available radiocarbon dates for the Bell Beaker contexts in Southern France (Lemercier et al. 2014, Figure 13) show the large discrepancies between the two different methodological approaches. The in archaeology still frequently used sum calibration would compared to the Bayesian analysis expand the time interval for the different Bell Beaker horizons partly for ~700y.....	17
Figure 2.10 The calibration curve Intcal09 (Reimer et al. 2009). Detailed the for this analysis important time intervals.....	18
Figure 3.1 Planum necropolis Passy (Lemercier et al. 2010).....	20
Figure 3.2 Necropolis Passy. The monuments of sector A and B with burials and radiocarbon determinations.....	22
Figure 3.3 Probability distributions of dates from the necropolis Passy (cf table 3.1). Model 1 is established under the assumption, that all monuments of sector A and sector B belong to one necropolis and the same society. Model agreement: $A_{\text{model}}=98$, $A_{\text{overall}}=97.1$	23
Figure 3.4 Probability distribution of dates from the necropolis Passy. Model 2 is established under the assumption, that the necropolis is divided into the two sectors A and B. Regarding the architecture, the burial rites, and the paleopathology there are indications that sector A and sector B are two different necropolises. Model agreement: $A_{\text{model}}=92.4$, $A_{\text{overall}}=94.3$	24
Figure 3.5 Span A, sector La Sablonnière.....	25
Figure 3.6 Span B, sector Le Richebourg.....	25
Figure 3.7 Reconstruction of the Passy graves. Drawing by the author after G. Tosello, (Constantin et al. 1997).....	25
Figure 3.8 Planum necropolis Balloy, Le Réaudins with the available radiocarbon dates (planum after Mordant 1997, 450).....	28
Figure 3.9 Probability of dates from Balloy, Le Réaudins. Model agreement: $A_{\text{model}}=10$, $A_{\text{overall}}=105.9$	29
Figure 3.10 Necropolis Fleury-sur-Orne (Desloges 1994: 532).....	30
Figure 3.11 Rots (Desloges 1994: 518).....	31
Figure 3.12 Reconstruction of a double burial in Téviec, Museum Toulouse. Photo courtesy of Didier Descouens - CC-by-sa / Wikimedia Commons.....	31

Figure 3.13 Planum of the double burial A in cist, Téviec (Midgley 2005, 59; Péquart et al. 1937)	32
Figure 3.14 Goumoisière, cists 1, 2, 3, and 5 (after Soler 2007: 117)	34
Figure 3.15 Probability of dates from all available radiocarbon results in the cist burial site Goumoisière. Model agreement: $A_{\text{model}}=85, A_{\text{overall}}=82.7$	35
Figure 3.16 The tumulus Carnacéen St. Michel in Carnac with probability of radiocarbon dates. Planum according to Le Rouzic 1932 and Boujot/Cassen 1992. Photo of green stone artifacts with the kind permission of Serge Cassen, CNRS Nantes (Cassen 2011, Figure 4). Model agreement: $A_{\text{model}}: 95.4, A_{\text{overall}}: 96.7$	37
Figure 3.17 The tumulus Carnacéen Tumiac. Planum after Fouquet 1857, musée de la Société polymathique du Morbihan, Vannes (after Herbault/Querré 2004: 501)	38
Figure 3.18 Tumiac. Photo courtesy of Stéphane Batigne, CC-by-sa /Wikimedia Commons.....	39
Figure 3.19 Jade axes and variscite collier, Tumiac. Photo courtesy of Serge Cassen (Cassen 2011: Figure 3)	39
Figure 3.20 Round and long tumuli with non-accessible ancient dolmens. Le Castelic and Kervinio (after Soler 2007); St. Germain (after Cassen et al. 2000). Ceramic of St. Germain with the kind permission of Serge Cassen. The necropolis Manio (after Cassen 2000)	41
Figure 3.21 Planum Lannec er Gadouer (after Boujot/Cassen 1998, Cassen et al. 2000, Figure 3)	42
Figure 3.22 Radiocarbon determinations from Lannec er Gadouer. Model agreement: $A_{\text{model}}=69, A_{\text{overall}}=71.9$	43
Figure 3.23 Planum Er Grah with radiocarbon results (after Cassen 2009, Figure 7)	44
Figure 3.24 Radiocarbon determinations from Er Grah. Model agreement: $A_{\text{model}}=71.6, A_{\text{overall}}=73.1$	45
Figure 3.25 Planum Les Fouaillages, Guernsey (after Kinnes/Grant 1983: 30)	46
Figure 3.26 Reconstruction La Pierre Tourneresse. Drawing after Cédric Lacherez,-CC-by-sa /Wikimedia Commons.....	52
Figure 3.27 Probability of radiocarbon dates, La Pierre Tourneresse, Cairon, Calvados. Model agreement: $A_{\text{model}}=94.9, A_{\text{overall}}=95$	52
Figure 3.28 Colombiers-sur Seulles (after Billard/Chancerel 1998, 253) and Hazleton in Southwest England (after Malone 2005, 120).....	53
Figure 3.29 Probability distribution of dates from human bones in gallery graves in the Paris Basin. Model agreement: $A_{\text{model}}=94.4, A_{\text{overall}}=93.2$	54
Figure 3.30 Probability distribution of dates from human bone samples from megalithic graves in Breton. Model agreement: $A_{\text{model}}=97.1, A_{\text{overall}}=97.4$	55
Figure 3.31 The passage graves in Port Blanc, Quiberon	56
Figure 3.32 Planum of the passage graves at Port Blanc showing their location directly on the cliffs (after Gouézin 2007). The southwestern grave is today partly eroded.....	56
Figure 3.33 Barnenez from the southeast.....	57
Figure 3.34 Destroyed section of Barnenez from the northeast	57
Figure 3.35 Planum Barnenez (after Joussaume 1985: 129)	58
Figure 3.36 Probability of radiocarbon determinations from Barnenez	58
Figure 3.37 Planum Le Souc’h (after Laporte 2010)	59
Figure 3.38 Probability of radiocarbon results from Le Souc’h. Model agreement: $A_{\text{model}}=94.3, A_{\text{overall}}=94.3$	59
Figure 3.39 Ile Guénioc, tumuli I, II and III (after Giot 2007: 42)	60
Figure 3.40 Planum Table des Marchands with radiocarbon results (after Cassen 2009)	62
Figure 3.41 Probability of all dates from the site Table des Marchands. Start alignment/TPQ-activities 5223-5047 cal BC, 68.2%; 5370-4970 cal BC, 95.4%; end alignment TPQ-activities 4208-4057 cal BC, 68.2%; 4257-3977 cal BC, 95.4%; start TDM 4112-3932 cal BC, 68.2%; 4181-3841 cal BC, 95.4%. Model agreement: $A_{\text{model}}=94.7$ and $A_{\text{overall}}=95.1$	63
Figure 3.42 Table des Marchands from the southeast.....	64
Figure 3.43 The Petit Mont in Arzon (after Le Roux 1999, 51)	64
Figure 3.44 Probability of the dates from the Petit Mont in Arzon. Model agreement: $A_{\text{model}}=74.4, A_{\text{overall}}=77.8$	65
Figure 3.45 Petit Mont. Photo courtesy of Manvyi, - CC-by-sa /Wikimedia Commons	66
Figure 3.46 Façade of Gavrinis.....	66
Figure 3.47 Planum Dissignac after the excavations in 1976 (after www.http://bsecher.pagesperso-orange.fr/Dissignac.htm , Figure 14)	67

Figure 3.48 Planum from the angle-formed grave Goërem (after Briard 2000).....	67
Figure 3.49 Planum V-formed gallery grave Liscuis I (after Briard 2000, 41).....	68
Figure 3.50 Probability of the dates from the the necropolis Liscuis. Model agreement: $A_{\text{model}}=98.7$, $A_{\text{overall}}=98.7$	68
Figure 3.51 Planum Le Déhus (after Schulting 2010: 151).....	69
Figure 3.52 Probability distributions of dates from Le Déhus.....	69
Figure 3.53 Probability distribution for the dates of the passage grave La Hogue Bie, Jersey (after Schulting 2010). Model agreement: $A_{\text{model}}=84.9$, $A_{\text{overall}}=85.9$	70
Figure 3.54 Planum Chirons/Bougon (after Mohen 1986).....	73
Figure 3.55 Tumulus F and passage grave FO,Chirons/Bougon. Photo courtesy of Joachim Jahnke, CC-by-sa /Wikimedia commons.....	73
Figure 3.56 Probability of radiocarbon determinations from monuments A-F, Chirons/Bougon. Model agreement: $A_{\text{model}}=96.4$, $A_{\text{overall}}=94.5$	74
Figure 3.57 Chamber FO, Chirons/Bougon (after Chambon 2003, Figure 26).....	75
Figure 3.58 Planum necropolis Champ Châlon/Benon, monuments A, B and C (after Joussaume 2006).....	76
Figure 3.59 The probability of radiocarbon dates from the necropolis Champ Châlon. The earliest individual in the necropolis is buried in monument B1 at ~4190 cal BC (4311–4054 cal BC, 68.1%; 4329–4046 cal BC, 95.4%). Four of the individuals in the monuments B2, C and A were deposited within the time interval 3969–3532 cal BC 95.4%. Model agreement: $A_{\text{model}}=97.7$, $A_{\text{overall}}=97.7$	77
Figure 3.60 Planum Péré C (after Laporte et al. 2002).....	78
Figure 3.61 Péré C: The model calculates the construction of the monument and phase I with the accessible dolmen to ~4340 cal BC (4372–4278 cal BC, 68.2%, 4420–4262 cal BC, 95.4%) and the enlargement with the section to the east and the passage grave somewhat later to ~4290 cal BC (4329–4262 cal BC, 68.2%; 4337–4248 cal BC, 95.4%). Model agreement: $A_{\text{model}}=65.6$, $A_{\text{overall}}=65.7$	79
Figure 3.62 Probability of all available radiocarbon results from human bones out of passage graves in the Central West (without Bougon).Model agreement: $A_{\text{model}}=98.8$, $A_{\text{overall}}=98.7$	80
Figure 3.63 Sketch of Chamber B with the reported two ‘seated’ skeletons from F.C. Lukis (Schulting 2010, Figure 3) with the kind permission of Coll. Ant. V © Guernsey, Museum / Galleries, State of Guernsey 2009)......	84
Figure 3.64 Vierville/Butte á Luzerne, chamber A. (Verron 2007: 139).....	88
Figure 3.65 Probability of dates from Vierville/Butte á Luzerne. Model agreement: $A_{\text{model}}=81.9$, $A_{\text{overall}}=84.4$	88
Figure 3.66 La Hoguette (after Caillaud/Lagnel 1972; after Chambon 2003: 64).....	89
Figure 3.67 Corridor in dry wall technique La Hogue.....	90
Figure 3.68 Distribution of the probability of radiocarbon measurements from La Hoguette. Model agreement: $A_{\text{model}}=83.1$, $A_{\text{overall}}=79.8$	91
Figure 3.69 Necropolis Condé-sur Ifs. Planum Ernes and La Bruyere du Hamel (after Billard/Chancerel 1998).....	92
Figure 3.70 Main pre-megalithic sites and earliest megaliths mentioned in the text (chapter 3, p. 19-47).....	96
Figure 3.71 Main sites mentioned in text (chapter 3, p. 47-94).....	97
Figure 3.72 Matrix of sites in Northwest France with known stratigraphy (after Cassen 2009, completed).....	98
Figure 4.1 El Padró I. Photo courtesy of Miquel Molist.....	129
Figure 4.2 Font de la Vena. Photo courtesy of Miquel Molist.....	130
Figure 4.3 Font de la Vena, planum and side profiles chamber (Molist et al.1987, 64).....	130
Figure 4.4 Tomba del General, Cap de Creus from the north.....	131
Figure 4.5 Coll de Madas I by Catallops. The simple dolmen is part of a small necropolis.....	132
Figure 4.6 Estansys I, La Jonquera, dolmen with antechamber.....	133
Figure 4.7 Dolmen de la Carena, Cap de Creus from the west.....	133
Figure 4.8 Dolmen de les Ruïnes, Cap de Creus from the southwest.....	134
Figure 4.9 Dolmen Taula del Lladres, Coastal Pyrenees, simple dolmen with cup marks on the cap stone.....	134
Figure 4.10 Vines Mortes I, Cap de Creus. Passage grave with rectangular chamber.....	135

Figure 4.11 Left: dolmen Mas Puig de Caneres, East Pyrenees with a sub-circular chamber, right: gallery Cova d'en Diana, Baix Empordá.....	135
Figure 4.12 Catalanian megalithic graves. Left: dolmen de la Carena (after Tarrús i Galter 2002, Figure 223, right: Dolmen de les Ruïnes, Cap de Creus (after Tarrús i Galter 2002, Figure 222).....	136
Figure 4.13 Catalanian megalithic graves. Above left: dolmen de Estany I (after Tarrús i Galter 2002, Figure 69), right: dolmen de Estany II (Cura/Morera 1996, Figure 2). Below left: dolmen de Arrenyats (Cura i Morera/Vilardell 1996, Figure 3) right: dolmen Creu d'En Cobertella (after Tarrús i Galter 2002, Figure 293).....	137
Figure 4.14 Recinto Mas Baleta, La Jonquera from the west	138
Figure 4.15 Bayesian model with available radiocarbon dates from the Neolithic and the Copper Age, zone II and IV (according to www.telearcheology.com with the megalith zones East Pyrenees and Central Catalan Depression, where the first megaliths in Catalonia occur. Model agreement: A _{model} : 94.7, A _{overall} : 94.....	139
Figure 4.16 The zoning of the available radiocarbon dates in Catalonia according to www.telearcheology.es. The proposed zoning follows recent landscapes and natural borders. The main megalithic regions are red marked. Map source Google Earth, 20.09. 2011.....	140
Figure 4.17 The main pre-megalithic sites and early megaliths mentioned in the text (chapter 4, p. 127-129).	143
Figure 4.18 The main sites mentioned in text (chapters 4.3- 4.7).	144
Figure 5.1 Camp del Ginèbre, Caramany. The different grave forms (after Vaquer 2007: 17)	153
Figure 5.2 Planum Camp del Ginèbre (after Claustre 1998, 170)	154
Figure 5.3 Necropolis Najac, Siran, Hérault. Planum chamber 3 (after Mahieu 1992: 146).....	154
Figure 5.4 Necropolis Najac, Siran, Hérault. Transversal arrowheads from chamber 2, diagnostic Chasséen ceramic chamber 3 (after Mahieu 1992: 146, 149)	155
Figure 5.5 Planum and profile Boujas, Aigne (Hérault) (Vaquer 2007: 16)	155
Figure 5.6 Chasséen grave St. Jean du Desert. Photo courtesy of Gérard Sauzade	156
Figure 5.7 Probability of radiocarbon results from Château Blanc in Ventabren. Model agreement: A _{model} =87, A _{overall} =87.5.....	157
Figure 5.8 Château Blanc, Ventabren. Plan after Hasler <i>et al.</i> 1998	158
Figure 5.9 Simple dolmen at Coll del Pinyer and Cap the Creus, French Pyrenees	158
Figure 5.10 Dolmen with a round stone basement for a tumulus	159
Figure 5.11 Ante-chamber Dolmen Languedocien de Lamalou, St. Hippolyte du Fort	160
Figure 5.12 Dolmen Cham du Florac in Lozere	160
Figure 5.13 Dolmens in Quercy.....	161
Figure 5.14 Provence, Dolmen by Grasse. Photo courtesy of Jonas Paulsson.	161
Figure 5.15 Standing stone Cham du Florac in Lozere	162
Figure 5.16 The stone circle Peyarine in the Cévennes with an average of approximately 140m is one of the largest stone circles in Europe.....	162
Figure 5.17 Probability of the 18 radiocarbon results from the Dolmen de l'Ubac. Model agreement: A _{model} =93.1, A _{overall} =93	165
Figure 5.20 Planum hypogea Crottes, Roaix in Vaucluse, layer 2 with articulated skeletons (after Chambon 2003: 51).....	169
Figure 5.21 Main sites mentioned in text with pre-megalithic sites and earliest megaliths (chapter 5, p. 151-155).	170
Figure 5.22 Main sites mentioned in text (chapters 5, p. 155-169).....	171
Figure 6.1 Probability of radiocarbon determinations from the Monte Revincu. Model agreement A _{model} =127.5, A _{overall} =124.5.....	180
Figure 6.2 The Neolithic settlement with necropolis on the Monte Revincu, North Corsica (after Leandri <i>et al.</i> 2007, Figure 12).....	180
Figure 6.3 Dolmen Cellucia or Somnital on the Monte Revincu, North Corsica. Photo courtesy of Franck Leandri	181
Figure 6.4 The Monte Revincu from Saint Florent.....	182
Figure 6.5 Dolmen di Tola di U Turmento, southwest Corsica	183
Figure 6.6 Dolmen de Fontanaccia, plain of Cauria	184
Figure 6.7 Dolmen de Settiva, Petreto-Bicchisano	184
Figure 6.8 The alignment de Renaghju, plain de Cauria.....	186

Figure 6.9 The alignment of Stantari, plain de Cauria.....	186
Figure 6.10. Main sites mentioned in text (map source: SRTM geodata.)	189
Figure 7.1 The Li Muri graves in Arzachena. Plan of the necropolis after Antona Rujju Ferrarese Ceruti 1992: 42.....	192
Figure 7.2 Dolmen de Ladas, Dolmen de Billela, Dolmen de Ciuledda, northern Sardinia	193
Figure 7.3 Simple Sardinian dolmens : Dolmens Matta Larentu I-VII (after Cicilloni 2010, Figure 90).....	194
Figure 7.4 More elaborated dolmens and passage graves. 1) Dolmen de Ladas, 2) Dolmen de Sa Coveccada, 3) Dolmen de Motorolla (after Cicilloni 2010 Figure 4, Figure 55, Figure 97)	195
Figure 7.5 Dolmen de Sa Coveccada, near Mores	196
Figure 7.6 Dolmen de Pranu Muttedu, near Goni.....	196
Figure 7.7 The megalithic pyramid Monte d'Accoddi, Sassari from the southwest, the planum after restauration (after Contu 2000, 42) and the probability of radiocarbon results. Model agreement: $A_{model}=109, A_{overall}=108.5$	198
Figure 7.8 Probability of all available radiocarbon dates from the Late, the Recent and the End Neolithic from Sardinia (Boschian <i>et al.</i> 2000–2001: 256; Lai 2009: 318; Melis 2009: 85; Tanda 2009; Tykot 1994). From the whole San Ciriaco horizon, two radiocarbon dates are available for the time interval 4334–4077 cal BC, 95.4%. The beginning of the Recent Neolithic Ozieri horizon is thus calculated to ~4050 cal BC, the beginning of the Chalcolithic to ~3570 cal BC. Model agreement: $A_{model}=85.2, A_{overall}=84.8$	199
Figure 7.9 Plan of the hypogea necropolis at Montessu. With the kind permission of Area archeologica di Montessu.....	200
Figure 7.10 The hypogea necropolis Montessu in Southwest Sardinia, grave VII and VIII.	201
Figure 7.11 Main sites mentioned in text (map source: SRTM geodata, black with white circle: site mentioned in text; black: megalithic graves on Sardinia).	202
Figure 8.1 Megalithic temples, settlements and grave forms on the Maltese archipelago.....	208
Figure 8.2 Situation in the landscape and orientation of the megaliths during the Ġgantija phase.....	209
Figure 8.3 Situation in the landscape and orientation of the megaliths during the Tarxien phase.....	210
Figure 8.4 Haġar Quim from the southwest	211
Figure 8.5 Mnajdra with view to the islands of Fifla.....	211
Figure 8.6 Mnajdra South	212
Figure 8.7 Entrance Ġgantija.....	212
Figure 8.8 Door construction Tarxien	213
Figure 8.9 Classical late dolmen Wied Filep	213
Figure 8.10 The Malta sequence. Bayesian model with the probability of dates from all available radiocarbon results of Maltese Neolithic and Bronze Age Tarxien cemetery contexts. Model agreement: $A_{model}=89.7, A_{overall}=90,0$	214
Figure 8.11 The Brochtorff circle sequence. Model agreement: $A_{model}=92.7, A_{overall}=89.3$	215
Figure 8.12 Main sites mentioned in text	216
Figure 9.1 Almeria graves. Zurgeña : 1) Loma de las Eras I, 2) Palacés II, 3) Vélez Blanco. Tabernas: 4) Llano de la Rueda I (Leisner/Leisner 1943, Tafel 2).....	223
Figure 9.2 Planum Campo de Hockey with grave 11 as a transitional structure to the megaliths (after Vijande Vila 2009, Figure 7).....	224
Figure 9.3 The elaborated monumental graves of Antequera. Above: entrance area Dolmen de Menga with members of the European megalithic studies group, in the middle: interior Dolmen de Menga, below on the left: entrance area Dolmen de Viera, below on the right: corridor El Romeral. Photo courtesy El Romera of El pantera - CC-by-sa /Wikimedia Commons.....	225
Figure 9.4 The elaborated megalith graves of Andalusia. Above: Dolmen de Viera (Leisner/Leisner 1943, Tafel 57), in the middle: Dolmen de Soto in Huelva (after García Sanjuán/Linares Catela 2009: 143, after Hugo Obermeier), below: Dolmen La Pastora in Sevilla (after García Sanjuán 2009a: 213, after Hugo Obermeier)	226
Figure 9.5 The Gorafe necropolises: Hoyas del Conquin. Above: dolmen 134, below view over the high plateau Hoyas del Conquin with grave 118	228
Figure 9.6 The Gorafe necropolises: graves La Sabina (Leisner/Leisner 1943, Tafel 35).....	229
Figure 9.7 The Gorafe necropolises: graves La Sabina (Leisner/Leisner 1943, Tafel 35).....	229

Figure 9.8 The fortified settlement of Los Millares. Above: the main gate, below muralla I, sector with megalithic architectonic elements	230
Figure 9.9 The fortified settlement of Los Millares. Above grave LIV from the southeast, below Fortín I and view to the northeast	232
Figure 9.10 Probability of radiocarbon determinations from the fortified settlement of Los Millares, Andalusia. Model agreement: $A_{\text{model}}=92.2$, $A_{\text{overall}}=88.1$	233
Figure 9.11 Necropolis Peñas de los Gitanos, Montefrío. Left: grave 23, right grave 18	235
Figure 9.12 Peñas de los Gitanos, Montefrío, main plateau from the northeast.....	236
Figure 9.13 Probability of dates from las Peñas de los Gitanos/Los Castillejos (Montefrío, Granada). Model agreement: $A_{\text{model}}=75$; $A_{\text{overall}}=75.2$	237
Figure 9.14 Necropolis Peñas de los Gitanos, Montefrío. Graves group 25 (Leisner/Leisner 1943, Tafel 52).....	238
Figure 9.15 Main sites mentioned in the text.	241
Figure 10.1 Necropolis Palmeira in the Mochique Mountains, Algarve. Graves 1-17 (Leisner/Leisner 1959, Taf. 46) (1).....	252
Figure 10.1 Necropolis Palmeira in the Mochique Mountains, Algarve. Graves 1-17 (Leisner/Leisner 1959, Taf. 46) (2).....	253
Figure 10.2 Alamo Grave 5, Valverde/Evora, Alentejo	254
Figure 10.3 Planum Cotogrande 1 (after Fábregas Válcara/Vilaseco Vázquez 2003, Figure 5)	254
Figure 10.4 Passage grave Anta do Olival da Pega 2 . Photo courtesy João Carvalho-CC-by-sa Wikimedia Commons	255
Figure 10.5 The more elaborated passage graves in the Alentejo: Anta Grande do Zambujeiro, Valverde and Anta Grande da Comenda da Igreja, Montemor-o-Novo.....	256
Figure 10.6 The Anta Grande da Comenda da Igreja, Montemor-o-Novo(Leisner/Leisner 1959, Tafel 25)	257
Figure 10.7 Non-accessible dolmens in Galicia (Leisner/Leisner 1956, Tafel 22). 1. Agro dos Balados, 2. Mamoá von Espinareda, 3. -5. La Mourela, 6.-7. Mamoá 2 und 7, Monte de Morá	259
Figure 10. 8 Passage graves with graded cover stones in Beira and Minho (Leisner/Leisner 1956, Tafel 19). 1.) Dolmen de Carapito, 2.) Anta da Barrosa, 3.) Chã do Mezio 4, 4.) Lapa do Repilau, 5.) Val de Cadella 2	260
Figure 10.9 Cromlech dos Almendres, Alentejo and stone circles in the southern Westiberian peninsula (planum after Calado 2006, Figure 4).....	261
Figure 10.10 Time interval and span for the results gained from charcoal samples compared to the results gained from human bones from megalithic grave contexts on the West Iberian Peninsula. The measurements for the charcoal samples start ~3800y earlier than the results for human bones. Furthermore, the span for charcoal samples is ~3.5 times longer than the span for the human bone samples. 60 of the 213 available radiocarbon results from charcoal samples precede the first radiocarbon dates from human bones	263
Figure 10.11 Probability of radiocarbon dates from megalithic contexts in the Estremadura with associated diagnostic material. Model structure and phases (defined according to the approach of Boaventura 2009, 2010). Model agreement: $A_{\text{model}}=110.4$, $A_{\text{overall}}=110.5$	265
Figure 10.12 Probability of dates from megalithic contexts from the Alentejo according to the diagnostic archaeological material. Defined phases and model structure (after Boaventura 2009). Model agreement: $A_{\text{model}}=113.8$, $A_{\text{overall}}=113.5$	267
Figure 10.13 Probability of all dates from megaliths in Beira with clear contexts. Model agreement: $A_{\text{model}}=104.1$, $A_{\text{overall}}=104.3$. The TPQ-values originate from contexts such as the ancient soil and layers under the tumuli or the debris of the tumuli. The phase of construction and use is defined according to samples originating from the chambers. The model is established following Boaventuras approach (2009).....	268
Figure 10.14a Dolmen de Areita. The grave from the front and geometric microlites (Museu Eduardo Tavares, S. João da Pesqueira). With the kind permission of Artur Oliveira, Cultural Heritage, Municipality of S. João da Pesqueira	269
Figure 10.14b Dolmen de Areita. Beads of schist, variscite and fluorite (Museu Eduardo Tavares, S. João da Pesqueira) and planum dolmen de Areite. With the kind permission of Artur Oliveira, Cultural Heritage, Municipality of S. João da Pesqueira.	270
Figure 10.15 Probability of dates from Areite 1/ S. João da Pesqueira in the Beira interior. Model agreement: $A_{\text{model}}=90.4$, $A_{\text{overall}}=90.1$	270
Figure 10.16 Dolmen de Dombate. Above, photo courtesy Lanbricae - CC-by-sa /Wikimedia Commons, below (after Fábregas Válcara/Vilaseco Vázquez 2003, Figure 3).....	271
Figure 10.17 Probability of dates from the dolmen de Dombate. Model agreement: $A_{\text{model}}=98.8$, $A_{\text{overall}}=99.6$	272
Figure 10.18 The ‘black colour sequence’ from Galician megalithic graves. Modell Agreement: $A_{\text{model}}=97.8$, $A_{\text{overall}}=97.7$	273
Figure 10.19 Black and red paintings on the side stones C6 and C5 in the Dolmen de Antelas, Viseu (Shee Twohig 1981, Figure 38)	273

Figure 10.20 Idol plaques, Lilius classical type I (2010, Fig: 4a).....	274
Figure 10.21 Planum Monte Canelas 1, the under layer (after Parreira/Serpa 1995, 5)	277
Figure 10.22 The main pre-megalithic sites and early megaliths mentioned in the text (chapter 10, p. 249-251).	280
Figure 10.23 Main sites mentioned in text (chapter 10, p. 251-271)	280
Figure 12.1 Map showing dates estimated for the start of megaliths in the different European regions in 95% probability (68% probability in brackets). Bold and cursive are the estimations represented based on samples out of megalithic contexts, straight the time intervals associated to the earliest cultural material in the megaliths.....	316
Figure 12.2 Map showing dates estimated for the start of accessible megaliths as dolmens and passage graves in the different European regions in 95% probability (68% probability in brackets). Bold and cursive are the estimations represented based on samples out of megalithic contexts, straight the time interval associated to the earliest cultural material in the accessible megaliths	317
Figure 12.3 Variscite beads from the tumulus Er Grah. Foto with the kind permission of the museum in Carnac.....	318
Figure 12.4 Variscite beads from the tumulus St. Michel with the kind permission of the Museum Carnac (Photo courtesy of Serge Cassen), and dendrogram obtained from a hierarchical classification of data from Neolithic beads and geological references of variscite (minimum skip, Euclidian distances, 24 chemical elements) (after Querré et al 2008, Figure 2). The variscite beads from the St. Michel exhibit Can Tintorer in Catalonia as source	319
Figure 12.5 Variscite sources and indications for sources in Europe with the distribution of variscite objects in the 5th millennium and the first half of the 4th millennium cal BC (after Herbaut/Querré 2004) correlated to the early megaliths of the 5th millennium cal BC.....	320
Figure 12.6 Variscite beads from the tumulus Mane er Hroëck, Carnac. Photo courtesy of Serge Cassen	320
Figure 12.7 Spreading of variscite objects in contexts from the second half of the 4th and the 3rd millennium cal BC (after Herbaut/Querré 2004)	321
Figure 12.8 Distribution of jadeite axes from the 5 th and the beginning of the 4th millennium cal BC with the jadeite sources compared to the cooper axes and gold artifacts in Eastern Europe (after Pétrequin <i>et al.</i> 2012: 193) and correlated to the early megalithic clusters.....	322
Figure 12.9 Detail, the 1:5 Million International Geological Map of Europe and Adjacent Areas Map. BGR (Hannover), (Asch 2005) with the early megalithic occurrences. Simplified legend: Reddish: igneous intrusive rocks; pink: igneous extrusive rocks; yellow: sedimentary rocks; green/blue/lila: Mesozoic. Brown: Paleozoic	323
Figure 12.10 The natural ritual landscape. Rock formations at the alignment Renaghju on Corsica and the necropolis Li Muri on Sardinia	324
Figure Appendix 1.1 Oversight Graphic	332
Figure Appendix 2.1 Megalithic terminology of the various regions	334

List of Tables

Table 3.1 Radiocarbon dates from the Paris Basin/Northern France	99
Table 3.2 Radiocarbon dates from Brittany	107
Table 3.3 Radiocarbon dates from the Channel Islands.....	119
Table 3.4 Radiocarbon dates from Central West France.....	121
Table 4.1 Radiocarbon dates from Catalonia.....	145
Table 6.1 Radiocarbon dates from Corsica.....	190
Table 7.1 Radiocarbon dates from Sardinia	203
Table 8.1 Radiocarbon dates from Malta	218
Table 9.1 Radiocarbon dates from Andalusia	243
Table 10.1 Radiocarbon dates from the West Iberian Peninsula	282

Acknowledgements

This project was realized with the financial support of the Graduate School “Human Development in Landscapes” at Kiel University and the FAZIT foundation in Frankfurt on the Main. I would like to express my gratitude for the opportunity to undertake the venture reported here. In addition to funding my PhD-project, both the Graduate School and the FAZIT foundation gave me the chance to carry out successful excursions from 2008–2011 to the megalithic regions, Sardinia, Corsica, Southern and Northwest France, Catalonia, Andalusia and Scotland.

My wholehearted thanks go to my supervisor Prof Johannes Müller, whose seminar European Megaliths at the FU Berlin in 1996 was the trigger for my ongoing passion for megaliths. My very special thanks go to my other supervisors Dr. Marie-Josée Nadeau, who always had an open mind and door for discussions and all my dating concerns and to Prof Hans-Rudolf Bork. I would also like to thank my mentor Dr Mara Weinelt for all the support, and further members or previous members of the Graduate School, in particular Prof Piet Groothes, Prof Antonia Davidovich, Rhina Colunge, Dr Kemal Moetz, Dr Stefan Dreibrodt, Dr Carolin Lubos, Dr Engdawork Assefa, Prof Lutz Käppel, Dr Vasiliki Pothou, Dr Helmut Kroll, Dr Almut Nebel, Dr John Meadows, Prof Ben Kyora-Krause, Prof Doris Mischka, Dr Martin Furchholt, Dr Martin Hinz, Dr Robert Hofmann, Michael Teichmann, Dr Christoph Steffen, Dr Andrea Ricci, Dr Natalia Toma-Kansteiner, Phillip Meurer, Dr Christoph Nübel, Dr Vincent Robin, Dr Melanie Harder, Dr Rémi Berthon, Dr Aikatharini Glykou, Stefanie Bergemann and Daniel Zwick.

The creation of such a supra-regional analysis would not have been possible without the help of the megalith specialists for the singular regions. I would therefore like to thank the members of the European megalith community, who supported me with data, books, articles, important information, commentaries, discussions, and photo material. Special thanks go to those researchers who received me as an unknown PhD student from Germany during my field trips throughout Europe in their offices, in coffeehouses, at their homes, and on their excavations.

Since I honestly do not know who to mention first, I have to sort these great people from north to south according to megalithic regions. From Scandinavia I would like to mention Prof Karl-Göran Sjögren, Prof Lars Larsson, Dr Torbjörn Ahlström, Dr Ludvig Pappmehl-Dufay, Dr Thorben Dehn, Dr Nils H. Andersen, Prof Cornelius Holtorf and Dr Magnus Andersson. From Great Britain Prof Richard Bradley, Prof Alex Bayliss, Prof Chris Scarre, Prof Alistair Whittle, Dr Bissierka Gaydarska, Prof Michael Parker-Pearson, Prof Colin Richards, Dr Alison Sheridan, Dr Magdalena Midgley, Dr Gordon Cook, and Dr Ann Brundle were of great assistance. In France Dr Serge Cassen, Dr Christine Boujot, Dr Gérard Sauzade, Dr Frank Leandri, Prof Phillipe Chambon, Dr Jean Deloges, Dr Cyrill Billard, Anne Ropars, Stefan Tzortzis, Prof Jean Guilaine, Prof Olivier Lemerrier, Dr Luc Laporte, Prof Roger Joussaume and Dr Reena Perschke were incredibly helpful. On Sardinia Prof Maria Grazia Melis, Prof Giuseppa Tanda, Giacomo Paglietti, Dr Luca Lai, and Prof Robert Tykot were of vital assistance. In Spain Prof Juan Antonio Camara Serrano, Dr Liliana Spanedda, Dr Joseph Tarrús, Prof Juan Molina, Dr Roberto Risch, Dr Juan Barcelo, Dr Miquel Molist, Prof Mimi Bueno helped me considerably and in Portugal Dr Philine Kalb, Prof Manuel Calado, Dr Rui Boaventura, Tanya Armbrüster and Prof Jorge Oliveira were indispensable. I would like to thank Prof Kristian Kristiansen for support and advice.

For the English corrections of this manuscript I would like to thank Dr Eileen Küçükkaraca and Jonathan Horwitz. For useful comments on the text my thanks go to Prof Maria Grazia Melis, Dr Frank Leandri, Dr Serge Cassen, Dr Martin Hinz and Dr Robert Hofmann and I am grateful to Ines Reese and my sisters Jessica Young and Jennifer Schulz-Hutter for graphical advice. I wish to thank Gunnell and Ingvar Paulsson. For useful comments and juridical support I would like to thank Kathrin Sachsenberg, Berlin and Tom Frey, Appenzell.

I would like to sincerely thank my parents for all their support in the past years.

And finally, my special warm thanks go to my team and family Jonathan, Fifi, Sigge and Jonas Paulsson. They followed without complaint on the field trips to the splendid European megalithic regions: Corsica, Sardinia, Malta, Southern France, Catalonia, Andalusia, the Alentejo, the Bretagne, the Calvados, the Paris Basin, the Lake District, Dumfries and Galloway, Aberdeenshire, Perthshire, the Orkney Islands, Denmark and Scania. Their support as chauffeurs, surveying technicians, photo assistants, and location scouts was invaluable. For them, no mountains were too high, no gorge too steep, no wetland too dangerous, no brush too tight, no landowner too angry, no bull too wild, no grave too narrow, and no weather too bad. They always accompanied me with enthusiasm and a map in their hands on the way to find the next megalith. Without their never-ending endurance I would not have managed.

This book is dedicated to them.

Chapter 1

Megaliths and megalithic societies in Europe

Summary: There are two competitive hypotheses for the origin of megaliths in Europe. The conventional views in the early 19th century were single-source theories with the emergence and spreading of megaliths in Europe outgoing from i.e. the orient. An alternative hypothesis arose under the impact of the early radiocarbon dating in the seventies of the last century and is until today dominating the megalith research. This hypothesis claims different nucleus areas for an independent and time delayed emergence of megaliths in Europe. The first chapter of this volume introduces the subject, surveys the central research questions and provides a history of ideas on the emergence of megaliths in Europe.

Introduction and central research questions

Megaliths (deduced from the Old Greek μέγας (mégas) big and λίθος (líthos) stone), which include megalithic tombs, standing stones, stone circles, alignments, and megalithic buildings or temples, are a worldwide, time-transcending phenomenon and appear in Europe, North and West Africa, Madagascar, the Near East, in North and South America and in Asia.

In Europe, where the main focus of this analysis is centered, the most of the approximately 35000¹ still existing megaliths were constructed during the Neolithic and the Copper Ages and are located in coastal areas. These megaliths represent just a small portion of the original existing monuments. They were built, on the one hand, along the so-called Atlantic façade in Norway, Sweden, Denmark, North Germany, the Netherlands, Belgium, Scotland, England, Ireland, Northwest France, Northern Spain and Portugal and, on the other hand, in the Mediterranean region in Southern and Southeast Spain, Southern France, on the Islands of Corsica, Sardinia, Malta and the Balears, in Northern Italy, Apulia, Sicily and also in Switzerland (cf. Figure 1.1.)

Strikingly, in Europe and even worldwide, the appearance and the architectonic concepts of megaliths are similar or even identical. Throughout the mentioned geographical areas, megalithic graves were built as dolmens and as passage or gallery graves. Moreover, anthropogenic erected stones stand either isolated in the landscapes or were arranged as circles or in rows. Furthermore, there is evidence all over Europe for an orientation of the graves towards the east or southeast in the direction of the rising sun.

After megaliths became popular in science, art, and literature in the Zeitgeist of Romanticism at the end of the 18th and the beginning of the 19th centuries,

and the first excavations were undertaken in that period, for example at the Maltese megalithic temples, the described similarities were recorded by travelers at that time. These reports represent the kickoff of a research debate continuing until today on the origin and emergence of the megaliths (cf. chap 1, p. 2).

The question arises if there is a single, original source from where a megalithic movement spread throughout Europe or whether these structures developed independently and/or even convergent in the singular regions with similar forwarding factors? Were megaliths part of an ideology which spread all over Europe? If so, how was such a transfer of knowledge implemented?

In an investigation on a wide, supra-regional European phenomenon like megaliths, an immense potential is created to observe cultural-historical processes and to carry out cognitive or social interrogations for and within the various prehistoric societies. With this in mind, it is possible to determine indications of interaction, of transfer and migration movements, and moreover the development of technical skills and the inner and outer organization of these societies. The construction of many of these monuments required an immense labor effort and building materials were often transported over long distances. Thus, the building and planning of these megaliths represent well-organized, communal endeavors.

In order to contribute to the ongoing debate, it is evident that the timeframe of the construction of the different megalithic forms must be determined and compared. Therefore, the approximately 2410 available radiocarbon results from European megalithic, pre-megalithic and contemporaneous non-megalithic contexts were compiled for this project, evaluated according to their context and quality, and finally compared. With an interpretative Bayesian statistical framework, it was possible to untangle the nuances of the differences for the calendar years as well as the origin and the spreading of the megaliths in the different regions to a greater extent and to define

¹ This number is a rough estimate reconstructed after Soulier 1998; Burl 2000; Kalb 2002; Trump 2002; Tarrús i Galter 2002; Sjögren 2003; Midgley 2008; Sanjuan 2009; Cicilloni 2010; Fritsch *et al.* 2010a; Leandri *et al.* 2014.

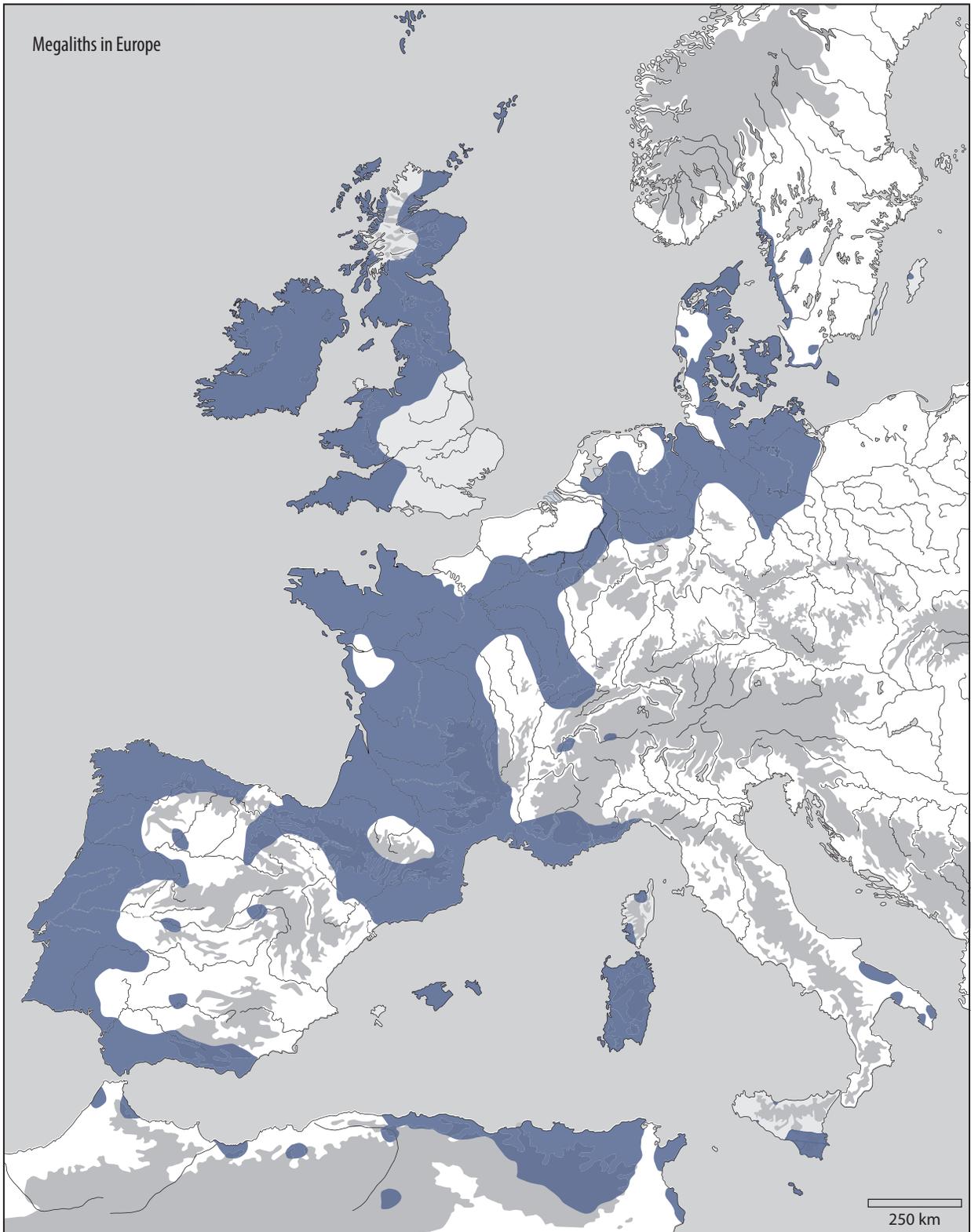


Figure 1.1 The megalithic regions in Europe and North Africa (after Camp 1961; Whitehouse 1981; Soulier 1998; Burl 2000; Kalb 2001; Malone 2001; Trump 2002; Sjögren 2003; Piccolo 2007; Scarre 2007; García Sanjuán 2009; Cicilloni 2010; Fritsch et al. 2010a; Leandri et al. 2014)

possible emergence and spreading scenarios for the archeological remains, for

'It's a capital mistake to theorize before one has data'
(Arthur Conan Doyle, *A scandal in Bohemia* 1891, 4).

Theories on the emergence and spreading of megaliths

Research on megaliths during recent decades was dominated by regional studies. Manifold publications are available for the different regions. Just a few

approaches considered megaliths as a wide, supra-regional phenomenon and focused on the origin and the spreading of megaliths throughout Europe. In the following, main research theories regarding this perspective will be summarized.

Research on megaliths from the late 19th century to the 1960s was mainly embossed by one-source and diffusion theories based on the typology and the morphology of the different graves.

One of the most influential approaches of this time was Oscar Montelius's consideration of megaliths worldwide (Montelius 1905) (Figure 1.2). He formulated the theory of the spreading of an idea and a super-diffusionistic view regarding the global megalithic movement.

Dösarna I Indien, Syrien, Sudan, Algeriet och Europa kunna icke tillskrivas ett och samma folk, ej ens och samma folkgrupp (Montelius 1905: 41).

The expansion of the megalithic idea was, according to Montelius, an ongoing process extending from the Orient over the southern European Mediterranean coast to Western Europe and from there over the coasts of the North Sea to the regions of the Baltic (Montelius 1889: 28; 1905). This theory corresponded to the *ex oriente lux* Zeitgeist of the 19th and the beginning of the 20th century.

Similar rudiments regarding megaliths in Brittany, Ireland, England and Scandinavia and their origin from the Orient were already asserted by M. Jehan de St. Clavier in 1863 in a short communication for the Société polymathique du Morbihan (St. Clavier 1863).

Gustav Kossina suggested Southern Scandinavia as the origin of the megalithic world which spread with the ancient Indo-European migration movement (Kossina 1910). Ernst Sprockhoff postulated a migration route from Ireland to Southern Scandinavia. His arguments for their origin in the Nordic countries were limited and restricted to observations solely on a similar form of the chambers (Sprockhoff 1938).

Most researchers preferred Montelius's theory of the spreading of an idea rather than whole migration movements. Gordon Childe considered the entire trans-European megalithic occurrence and he incorporated early the idea of a diffusion of 'oriental culture' by a partial maritime exchange (Childe 1925, 213). According to Childe, megaliths were assumed to have spread by the diffusion of a megalithic religion/idea by way of migrants who settled down long enough among local societies. Due to a certain prestige status, they were supposedly able to convert local inhabitants and

perhaps form a spiritual aristocracy (Childe 1940: 52) (cf. Figure 1.3).

Megalith-builders must be conceived as families coming by the sea from different quarters and settling down among native populations, to whom they brought their own peculiar version of the faith (Childe 1940: 52–53).

As a proliferation path he proposed a route from the Mediterranean to the Atlantic North West across the Pyrenean isthmus and a further dissemination of the megalithic tradition from there to Britain and then later over the sea route around Spain and Portugal (cf. Figure 1.3).

Later Childe extended this theory about the spreading of a megalithic religion along the coastlines over the sea route (Childe 1950; 1957; 1958: 124–134) by way of missionaries or prospectors with developed seafaring as a base. Similar theories were proposed by Brønstedt (1957: 193) and Nordman (1935: 75).

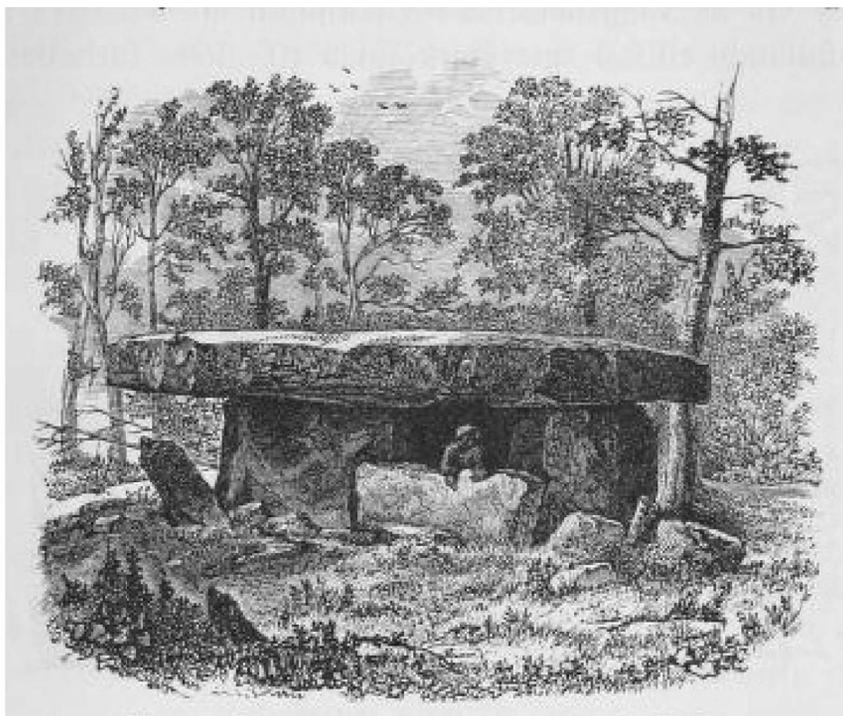
According to Glyn Daniel, the spreading of the megalithic tradition coincides with the prospection for copper (Daniel 1960); the impetuses behind the dispersal were colonialism, trade, and prospection by people with a strong religious faith and complex burial rites (Daniel 1963: 128).

At the beginning of the 1970s with the invention of radiocarbon dates in megalith research together with a processualist approach, single-source theories were questioned and discussions concerning the possibility of independent, converging regional developments and different nucleus areas in Europe resulted.

Colin Renfrew defined four or possibly five regions with an independent development of megaliths based on radiocarbon dates and on typological considerations including Portugal, Andalusia, Brittany, South West England, Denmark and possibly Ireland, Brittany being the earliest region with tombs already built before 4000 BC (Renfrew 1973: 120–129).

But we are no longer obliged to see the tombs as a result of a single movement, whether it originated in Iberia or in Brittany. Instead our task is to create some social model, some simple picture of how it all came about (Renfrew 1973: 124).

According to Colin Renfrew's more neo-evolutionistic approach, Neolithic societies were egalitarian and segmentally structured during the Early Neolithic and then changed in the younger horizons of the Neolithic to a stratified society with the henge monuments as central places. Thus, megaliths appeared as territorial markers for the Early Neolithic segmentary



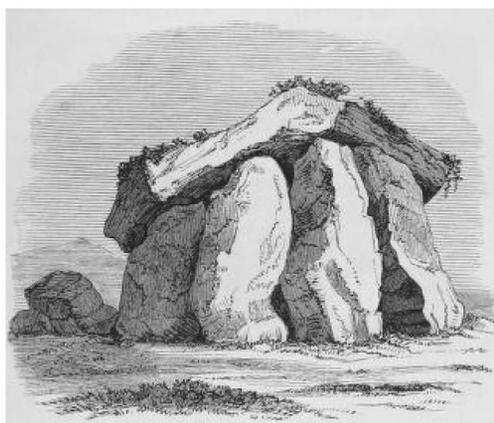
1. India, Katapur



2. Kaukasus, Krim



3. Sudan, Ladó



4. Portugal, Ayorolos



5. Palestine, Hebron

Figure 1.2 Dolmens world-wide. Drawings from Montelius 1905 *Orienten och Europa*. 1. India, p. 11, Figure 4; 2. Krim, p. 14, Figure 8; 3. Sudan, p. 16, Figure 9; 4. Portugal, p. 23, Figure 13; 5. Palestine, p. 13, Figure 6

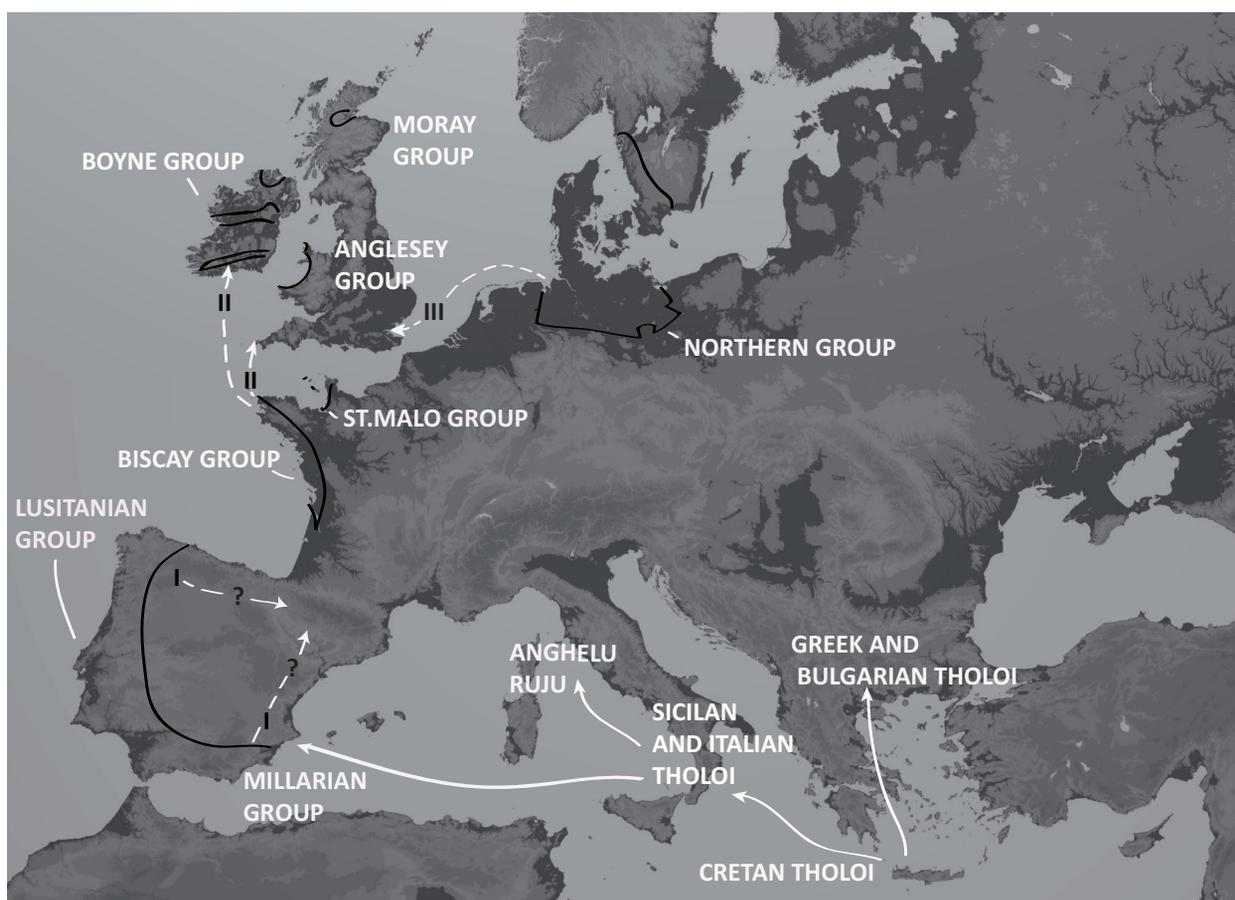


Figure 1.3 The modified diffusionism of Gordon Childe in Europe and his successors. Passage graves are seen as derivations of Cretan passage graves (after Renfrew 1973: 46)

societies. The dynamic behind this territorial behavior originated in a phase of population pressure through Central Europe in connection with agriculture. The Atlantic coast represented a natural border for the colonialization of new regions and competition for arable land necessitated territorial behavior and the marking of the landscape by pronounced monuments (Renfrew 1976). He later revised this model and the presumed coherence between territorial marking and segmentary societies due to fieldwork in Maes Howe and Quanterness on the Orkney Islands (Renfrew 1979; 1981).

Like Renfrew, Chapman proceeded from an independent development model for formal disposal areas and megaliths in the different regions. According to his interpretations, interments in cemeteries and monuments emerged in periods of imbalance between society and critical resources (Chapman 1981).

Andrew Sherratt compared the genesis of megaliths and monuments within three areas including Western France, Britain and Northern Europe and similarly developed a model of an independent origin from different starting points on the loess periphery (Sherratt 1990).

In his book *Le dolmen pour le morts*, Roger Jousaume provided an outline on megalithic regions in Europe and the world on a larger scale than Oscar Montelius in 1905. Jousaume compared architecture, archaeological material, and burial rites (Jousaume 1985) and registered megaliths which were constructed in Colombia, Japan, China, Korea, the Maghreb, Ethiopia, Syria, Libya, Israel, Jordan, the Caucasus, India, and on the Arabian Peninsula and Madagascar. Even if Jousaume accepted that the development of megaliths worldwide can only be considered as a convergent development, he again took a diffusionist standpoint and viewed the megaliths of the Atlantic façade as the origin of the megaliths in the Mediterranean regions. Furthermore, he considered megalithic developments in North Africa to be the result of a dispersal of megalithic phenomena from Europe (Jousaume 1985: 370–372; 2003).

The emphasis of Johannes Müller's approach was to define the chronology of the different megalithic grave forms for Europe (1987; 1998; 1999) based on 603 radiocarbon dates and sum calibrations. He determined two or three centers of origin for European megaliths: North West France, the Western Iberian Peninsula and possibly Ireland with passage graves

and dolmens in these specific regions from 5000 cal BC onwards. The megalithic grave tradition spreads from there to the backlands of West and Central France, to Southern Ireland and possibly to Wales and the South of England (Müller 1998: 78). Radiocarbon dates from the Netherlands, Northwest Germany, Denmark, and

Scandinavia suggest the beginning of megalithic architecture in these regions shortly before 3400 cal BC. The emergence of megaliths in the Mediterranean was, according to Müller's calculations, even later than their occurrence in the Northern regions, with Catalonia as a possible exception (Figure 1.4).



Figure 1.4 Estimates for the start of construction of accessible megaliths from Müller (1998), based on the then available 606 radiocarbon results out of megalithic and long barrow contexts. The time intervals are showing the approximate modified values from sum calibrations (1-sigma ranges) for the earliest accessible megalithic architecture in the regions as dolmens and passage graves. The early results originate mostly from including too many terminus post quem values into the calculations.

However, the trend in megalithic research in the last two decades or even longer focused on studies of regional scale and recognized the enormous diversity of monuments, burial rites, and megalithic societies (Midgley 2008: 178) (see various papers in volumes such as Beinhauer *et al.* 1999; Burenhult 2003; Furholt *et al.* 2011; 2012; Schulz Paulsson/Gaydarska 2014).

Investigated megalithic regions

The choice of megalithic regions to be described in more detail anticipates the synthesis of this analysis. The preference for the chosen areas followed an evaluation of the available 2410 radiocarbon determinations.

The selected megalithic regions have an ongoing megalithic sequence, where megaliths either first emerged in Europe or where a transfer of the megalithic thought occurred in the 5th millennium BC. Moreover, some neighboring regions are considered in order to determine and to demonstrate the demarcation of megalithic development in the specific areas. The selected regions include the Paris Basin, Brittany, the Channel Islands, Central West France, Catalonia, Southern France, Corsica, Sardinia, Malta, Andalusia, Portugal and Galicia.

The entire geographical area of Northwest France (the Paris Basin, the Channel Islands, Brittany, and Central West France) is considered in chapter 3 and portrays the largest analyzed area in this project. The main goal hereby was to compare and to demonstrate the quite

similar emergence of monumental proliferation in this region. Although the Channel Islands belong to Great Britain today, they are also discussed in this chapter due to their geographical closeness to the French coast and Brittany and a similar megalithic sequence.

The other megalithic regions in Northern Europe and the Mediterranean with a later emergence or a transfer of megaliths in the 4th or even the 3rd millennium cal BC are shortly summarized in chapter 11. In parts of these regions, extensive research projects are being carried out or are recently finished. Results from these finished projects are available based on the application of Bayesian statistical frameworks such as those for the dating of enclosures and megaliths in England and Ireland (Whittle *et al.* 2011). In others of these 'later' megalithic regions, such as Northern Germany or Southern Scandinavia research projects with dating programs and the application of Bayesian statistical frameworks are still ongoing, and the end results are not available yet (cf. chap 11, p. 304-306, 306-308). Preliminary reports are currently available for the ongoing Priority Programme of the German Research Foundation 'Frühe Monumentalität und soziale Differenzierung' at the University of Kiel (e.g. Dibbern/Hage 2010/2011; Fritsch *et al.* 2010; Furholt *et al.* 2014; Hinz/Müller 2012; Mischka 2011, cf. chap 11, p. 304-306) or for the ESS-, and Döserrygg projects of the Statens historiska museum in Sweden (e.g. Andersson/Nilsson 2009; Andersson *et al.* 2015; Lagergren *et al.* 2013, cf. chap 11 306-308).