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Vyvyan Evans

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## Language and Time

Using language and thought to fix events in time is one of the most complex computational feats that humans perform. In the first book-length taxonomy of temporal frames of reference, Vyvyan Evans provides an overview of the role of space in structuring human representations of time. Challenging the assumption that time is straightforwardly structured in terms of space, he shows that while space is important for temporal representation, time is nevertheless separate and distinguishable from it. Evans argues for three distinct temporal frames of reference in language and cognition and evaluates the nature of temporal reference from a cross-linguistic perspective. His central thesis is that the hallmark of temporal reference is transience, a property unique to the domain of time. This important study has implications not only for the relationship between space and time, but also for that between language and figurative thought, and the nature of linguistically mediated meaning construction.

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*A Cognitive Linguistics Approach*

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For Georgina, Myles, Lila, Isabella and Max

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Time present and time past  
Are both perhaps present in time future,  
And time future contained in time past.  
If all time is eternally present  
All time is unredeemable.

T.S. Eliot – Burnt Norton, *Four Quartets*

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## Preface

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This book provides a study in the domain of time: an arena of inquiry I first addressed in an earlier book-length treatment, unassumingly entitled *The Structure of Time*, published in 2004. In that book I was primarily concerned with detailing a level of language-specific concepts for time. These I referred to as *lexical concepts*. The present book is concerned with somewhat different issues, although the study developed here can be seen as complementing the previous one. It is also probably fair to say that this study is broader and in key respects more ambitious in scope, in terms of both its descriptive focus and its theoretical aspirations.

In this book I focus on the linguistic and conceptual resources we make use of when we fix events in time. This is the phenomenon of temporal reference. In particular, this book is concerned with the nature of temporal frames of reference. While there has been an increasing body of research investigating the nature of reference strategies in the domain of space, deriving from, in particular, the pioneering work of Leonard Talmy (e.g., 2000) and Stephen Levinson (e.g., 2003), there has been relatively little research conducted on temporal frames of reference, although there are now some notable and important exceptions (Bender *et al.* 2010, 2012; Tenbrink 2011; Zinken 2010). Hence, a book-length study of temporal frames of reference is both timely and overdue.

This book is concerned with two intertwined issues in the study of temporal reference. My first concern is to explore the nature of temporal frames of reference. Specifically, I examine their conceptual and representational content, and look at evidence from across a number of modalities, especially language. My aim here is to provide a taxonomy of temporal frames of reference. And in particular, I seek to compare and contrast temporal frames of reference with what is known regarding strategies for reference in the domain of space.

My second concern relates to the way in which linguistically mediated meaning construction proceeds, such that expressions encoding temporal frames of reference are correctly understood. This involves providing an account of the respective roles of linguistic and non-linguistic – which is to say, conceptual – knowledge. As temporal frames of reference appear to borrow structure and content from the domain of space, one of the issues I consider in detail is the

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nature of figurative language and thought. I provide an account of the nature and role of different types of figurative phenomena, including conceptual metaphors, in order to get to grips with the way different types of knowledge contribute to the way expressions encoding temporal frames of reference are understood.

A further motivation for conducting this study is a theoretical one. In my previous book, *How Words Mean*, published in 2009, I developed a theoretical model of lexical representation and linguistically mediated meaning construction. This is the Theory of Lexical Concepts and Cognitive Models, or LCCM Theory for short. A major concern of that book was theory construction. This necessarily reduced the scope for detailed application to linguistic and conceptual phenomena. The study presented here is intended, in part, as a means of making good on what that earlier book promised. This book represents, in effect, a detailed case study in how to deploy the toolkit and perspective provided by LCCM Theory. As such, it can be viewed as a companion to *How Words Mean*. Nevertheless, for purposes of accessibility, the present book is free standing. While some prior knowledge of LCCM Theory may be an advantage, this book assumes (almost) no knowledge of the earlier work, and introduces key ideas as they are required. Moreover, the present work takes the opportunity to further develop and refine certain aspects of LCCM Theory.

The study in this book applies the two theoretical dimensions modelled in LCCM Theory. These provide an account of lexical representation and the linguistic and non-linguistic processes necessary to account for linguistically mediated meaning construction. The two central parts of the present book, Parts II and III, address these respectively. In Part II, I present a detailed linguistic taxonomy of temporal frames of reference. I use the methodology provided by LCCM Theory to identify linguistic units and lexical concepts for temporal reference. In Part III, I address the issue of figurative language and thought in order to establish the way in which meaning construction applies in expressions that encode temporal frames of reference. I examine the nature of figurative language in order to work out the relative contribution of different types of knowledge to understanding how interpretations of temporal reference arise. I do so by making use of the way meaning construction is modelled in LCCM Theory.

The central claim I make in this book is this: time is a phenomenologically real experience that we perceive via interoceptively real, subjective experience. Moreover, the hallmark of temporal reference – that aspect of temporal experience under the microscope here – is *transience* (cf. Galton 2011). I argue that our temporal frames of reference, which are cognitive entities, are anchored to transience – I spell out its nature in Chapter 3. Previous research has often, perhaps blithely, assumed that time in many respects patterns after space. But it is now beginning to be acknowledged that a straightforward application of

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frames of reference from the domain of space can only get us so far in understanding temporal reference (Bender *et al.* 2012). A theme of my 2004 book was that time is distinct and distinguishable from space, and this is a theme I pick up and develop further in this book. I hope to convince the reader that the underpinnings of our ability to compute temporal reference are fundamentally temporal in nature. This doesn't mean, of course, that space is not important for representations of time. It is. But the onus on the analyst is to figure out what space brings to the table, so to speak, and what is inalienable to time. This is a recurring issue that I grapple with here.

Since the advent of experimental psychology over a century ago, the scientific investigation of time has been a recurring topic of study. And there is an impressively large literature in various branches of psychology stretching back well over a century. Moreover, over the last four decades, large literatures relating to time have developed in linguistics, in (cognitive) anthropological traditions, and in neuroscience. Yet despite the large amount of data and the range of theories across a number of disciplines, it is striking how much remains to be understood about time in language and thought. While this book is doubtless not for the faint-hearted, the study presented here will contribute, I hope, to our ongoing discovery of time's essence, and its mystery.

## Acknowledgements

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I have been fascinated by the study of time since I was a graduate student. A good number of fellow-travellers, who at different points have held the dubious honour of being described as my colleague(s), mentor(s) and/or friend(s), have variously agreed and disagreed with me in terms of how to approach time, temporal reference, figurative language, and a good many other things. I am especially indebted to the following researchers for their input into my understanding of time, for their own excellent research in this area, and for their forbearance when I have (in some cases too often) chosen to ignore their sound advice: Daniel Casasanto, Gilles Fauconnier, Sarah Duffy, George Lakoff, Kevin Moore, Günter Radden, Chris Sinha, Kazuko Shinohara, and Mark Turner. I owe a particular and profound debt to my colleagues Thora Tenbrink and Alan Wallington, not only for their own important contributions to the study of time, but also for their generosity in thinking through and engaging with me in detail on many of the ideas presented in this book. Thora and Alan read and commented on various draft chapters, going way beyond the call of duty in doing so. I will always be grateful for the time they have given me. I will also always be indebted to Andrea Tyler, my former PhD supervisor, and an enduring colleague and friend. It was Ande who supported my initial forays into the domain of time when I was a PhD student at Georgetown University. In addition to her own exemplary scholarship, I remain indebted to her for her example of what it means to be an outstanding researcher, educator and colleague. I am also grateful to two anonymous readers for Cambridge University Press who provided such excellent feedback.

I first began developing the ideas that are apparent here in the summer of 2010. Since then, I have had outstanding opportunities to present some of the ideas described in these pages at numerous venues around the world. I remain grateful to the organisers of these events for the opportunities I have been afforded. But I would like, in particular, to acknowledge the work of Barbara Lewandowska-Tomaszczyk in organising the very important TimeLing conference that took place in 2012 at the University of Łódź in Poland. I remain especially grateful to the audience and participants at that event for their extremely



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Abbreviations

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ADJ	Adjective
ATOM	A Theory of Magnitude
ERP	Event-related potential
F	Figure
FoR	Frame of reference
LCCM Theory	The Theory of Lexical Concepts and Cognitive Models
LM	Landmark
ME	Moving Ego construal
MT	Moving Time construal
MTL	The Mental Time Line hypothesis
NP	Noun phrase
O	Origo
OBL	Oblique
Part	Particle
PP	Perspective point
Prep	Preposition
PrepP	Prep-phrase
PRP	Primary reference point
RO	Reference object
RP	Reference point
s-FoR	Spatial frame of reference
SRP	Secondary reference point
Subj	Subject
TAM	Tense, aspect and modality
TE	Target event
t-FoR	Temporal frame of reference
TNS	Tense
TR	Trajector
VP	Verb phrase
VPC	Verb particle construction