1. Record Nr. UNINA9910956449303321

Titolo	Paths of development in L1 and L2 acquisition : in honor of Bonnie D. Schwartz / / edited by Sharon Unsworth ... [et al.]
Pubbl/distr/stampa	Amsterdam ; ; Philadelphia, : J. Benjamins Pub. Co., c2006
ISBN	9786612156007 9781282156005 1282156004 9789027293701 9027293708
Edizione	[1st ed.]
Descrizione fisica	viii, 222 p. : ill
Collana	Language acquisition & language disorders, , 0925-0123 ; ; v. 39
Altri autori (Persone)	SchwartzBonnie D UnsworthSharon
Disciplina	418
Soggetti	Language acquisition Second language acquisition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Paths of Development in L1 and L2 acquisition -- Editorial page -- Title page -- LCC data -- Table of contents -- List of contributors -- Introduction -- 1. Issues in addressing the developmental problem -- 2. Paths of development in child L1, child L2 and adult L2 acquisition -- 3. The papers in this volume -- 4. Summary and dedication -- References -- The acquisition of voice and transitivity alternations in Greek as native and second language -- 1. Introduction -- 2. Voice distinctions and transitivity alternations in Greek -- 2.1. The syntax of Voice -- 3. Voice morphology and transitivity alternations in Turkish -- 4. The study -- 4.1. Subjects -- 4.2. Description of the tasks -- 4.3. Research questions -- 5. Results: Sentence-picture matching task -- 5.1. 'Inherent' reflexives -- 5.2. Anti-causative verbs with non-active morphology and animate subjects -- 5.3. Anticausative verbs with active morphology and inanimate subject -- 5.4. Summary of results from the SPM task -- 5.5. Results: Elicited production task -- 6. Discussion -- 7. Conclusions -- Acknowledgements -- Notes -- References -- Appendix -- Do Root Infinitives ever have an overt

subject in child French?* -- 1. Introduction -- 2. The French data -- 3. Initial considerations: Null subjects and Root Infinitives -- 4. Background and assumptions -- 5. Apparent heavy subjects of Root Infinitives -- 5.1. Prosodic characteristics -- 5.2. Information structure characteristics -- 5.3. Discussion -- 6. Apparent clitic subjects of Root Infinitives -- 7. Conclusion -- Notes -- References -- The roots of syntax and how they grow -- 1. Introduction -- 2. Sowing the seeds -- 2.1. The Basic Variety -- 2.2. Does the Basic Variety hold up under scrutiny? -- 2.3. If not the Basic Variety, which seeds are sown? -- 2.4. Minimal Trees, Structure Building and Organic Grammar.
2.5. Organic Grammar vs. the Basic Variety -- 3. How does your garden grow? -- 3.1. Processability Theory -- 3.2. An Alternative to Processability -- 4. Conclusion -- Notes -- References -- Neuter gender and interface vulnerability in child L2/2L1 Dutch -- Introduction -- 1. The acquisition of grammatical gender of definite determiners in Dutch -- 1.1. Gender morphology on definite determiners in Dutch -- 1.2. The acquisition of gender morphology on definite articles by (monolingual) Dutch children -- 2. Experimental data from Hulk &amp -- Cornips (2005) -- 2.1. Methodology and subjects -- 2.2. Experimental results regarding the grammatical gender on the definite determiners -- Correct use of het -- Overgeneralization of the non-neuter definite determiner de -- Decrease in the use of bare nouns -- Summarising -- 3. Differences between mono- and bilingual children: Cross-linguistic influence or deficient input? -- 3.1. Cross-linguistic influence -- 3.2. The role of the input in the acquisition of neuter gender nouns -- 4. Linguistic analysis -- 4.1. Morphological variability of the definite determiner -- 4.2. The production of relative pronouns in Dutch -- 5. Concluding remarks -- Notes -- References -- The development of PATHS -- 1. Introduction -- 2. Experimental methodology -- 2.1. Original experimental goals -- 2.2. Elicitation materials and procedure -- 2.3. Test subjects and settings -- 3. Results for THROUGH and ACROSS: The splitting of complex trajectories -- 4. Lexical semantic complexity and delays in acquisition -- 4.1. The semantic feature hypothesis revisited -- 4.2. The semantic features hypothesis revived -- 5. Toward a non-linguistic solution: Complexity in the spatial representations of trajectories -- 5.1. Uniform linguistic complexity -- 5.2. Spatial representations and directional predication -- 6. Conclusion -- Acknowledgements.
Notes -- References -- Appendix -- More evidence on the knowledge of unaccusativity in L2 Japanese -- 1. Introduction -- 2. Theoretical background -- 2.1. The Unaccusative Hypothesis -- 2.2. Deep versus Surface Unaccusativity in Japanese -- 3. Previous studies -- 4. Experimental study -- 4.1. Hypotheses -- 4.2. Subjects -- 4.3. Task and materials -- 4.4. Group results -- 4.5. Individual results -- 5. Discussion and conclusion -- Acknowledgements -- Notes -- References -- What transfers? -- 1. Introduction -- 2. A brief historical perspective of L1 transfer -- 3. Language assumptions and L1 transfer -- 4. The modular transfer approach of Montrul -- 5. What transfers -- 6. Conclusion -- Notes -- References -- Full Transfer Full Access -- 1. Introduction -- 2. Full Transfer Full Access -- 2.1. Understanding transfer -- 2.2. Understanding access -- 2.3. Understanding transition -- 3. FTFA meets MOGUL -- 3.1. MOGUL architecture -- 3.2. Activation and competition -- 3.3. Full transfer, full access, and transition - revisited -- 4. Conclusion -- Notes -- References -- Name index -- Subject index -- The series Language Acquisition and Language Disorders.

Sommario/riassunto

The main focus of generative language development research in recent decades has been the logical problem of language acquisition - how

	learners go beyond the input to acquire complex linguistic knowledge. This collection deals with the complementary issue of the developmental problem of language acquisition: How do learners move from one developmental stage to another and how and why do grammars develop in a certain fashion? Building on considerable previous research, the authors address both general and specific issues related to paths of development. These issues are tackled through considering studies of L1 and L2 children and L2 adults learning a range of languages including Dutch, English, French, German, Greek and Japanese.

2.

Record Nr.	UNINA9910964094003321
Autore	Risken Hannes
Titolo	The Fokker-Planck Equation : Methods of Solution and Applications / / by Hannes Risken, Till Frank
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1996
ISBN	3-642-61544-9
Edizione	[2nd ed. 1996.]
Descrizione fisica	1 online resource (XIV, 472 p. 3 illus.)
Collana	Springer Series in Synergetics, , 2198-333X ; ; 18
Classificazione	58G32 60J65
Disciplina	530.1/3
Soggetti	Probabilities Physics System theory Mathematical physics Mathematics Probability Theory Applied and Technical Physics Complex Systems Mathematical Methods in Physics Applications of Mathematics Theoretical, Mathematical and Computational Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph

Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 1.1 Brownian Motion -- 1.2 Fokker-Planck Equation -- 1.3 Boltzmann Equation -- 1.4 Master Equation -- 2. Probability Theory -- 2.1 Random Variable and Probability Density -- 2.2 Characteristic Function and Cumulants -- 2.3 Generalization to Several Random Variables -- 2.4 Time-Dependent Random Variables -- 2.5 Several Time-Dependent Random Variables -- 3. Langevin Equations -- 3.1 Langevin Equation for Brownian Motion -- 3.2 Ornstein-Uhlenbeck Process -- 3.3 Nonlinear Langevin Equation, One Variable -- 3.4 Nonlinear Langevin Equations, Several Variables -- 3.5 Markov Property -- 3.6 Solutions of the Langevin Equation by Computer Simulation -- 4. Fokker-Planck Equation -- 4.1 Kramers-Moyal Forward Expansion -- 4.2 Kramers-Moyal Backward Expansion -- 4.3 Pawula Theorem -- 4.4 Fokker-Planck Equation for One Variable -- 4.5 Generation and Recombination Processes -- 4.6 Application of Truncated Kramers-Moyal Expansions -- 4.7 Fokker-Planck Equation for N Variables -- 4.8 Examples for Fokker-Planck Equations with Several Variables -- 4.9 Transformation of Variables -- 4.10 Covariant Form of the Fokker-Planck Equation -- 5. Fokker-Planck Equation for One Variable; Methods of Solution -- 5.1 Normalization -- 5.2 Stationary Solution -- 5.3 Ornstein-Uhlenbeck Process -- 5.4 Eigenfunction Expansion -- 5.5 Examples -- 5.6 Jump Conditions -- 5.7 A Bistable Model Potential -- 5.8 Eigenfunctions and Eigenvalues of Inverted Potentials -- 5.9 Approximate and Numerical Methods for Determining Eigenvalues and Eigenfunctions -- 5.10 Diffusion Over a Barrier -- 6. Fokker-Planck Equation for Several Variables; Methods of Solution -- 6.1 Approach of the Solutions to a Limit Solution -- 6.2 Expansion into a Biorthogonal Set -- 6.3 Transformation of the Fokker-Planck Operator, Eigenfunction Expansions -- 6.4 Detailed Balance -- 6.5 Ornstein-Uhlenbeck Process -- 6.6 Further Methods for Solving the Fokker-Planck Equation -- 7. Linear Response and Correlation Functions -- 7.1 Linear Response Function -- 7.2 Correlation Functions -- 7.3 Susceptibility -- 8. Reduction of the Number of Variables -- 8.1 First-Passage Time Problems -- 8.2 Drift and Diffusion Coefficients Independent of Some Variables -- 8.3 Adiabatic Elimination of Fast Variables -- 9. Solutions of Tridiagonal Recurrence Relations, Application to Ordinary and Partial Differential Equations -- 9.1 Applications and Forms of Tridiagonal Recurrence Relations -- 9.2 Solutions of Scalar Recurrence Relations -- 9.3 Solutions of Vector Recurrence Relations -- 9.4 Ordinary and Partial Differential Equations with Multiplicative Harmonic Time-Dependent Parameters -- 9.5 Methods for Calculating Continued Fractions -- 10. Solutions of the Kramers Equation -- 10.1 Forms of the Kramers Equation -- 10.2 Solutions for a Linear Force -- 10.3 Matrix Continued-Fraction Solutions of the Kramers Equation -- 10.4 Inverse Friction Expansion -- 11. Brownian Motion in Periodic Potentials -- 11.1 Applications -- 11.2 Normalization of the Langevin and Fokker-Planck Equations -- 11.3 High-Friction Limit -- 11.4 Low-Friction Limit -- 11.5 Stationary Solutions for Arbitrary Friction -- 11.6 Bistability between Running and Locked Solution -- 11.7 Instationary Solutions -- 11.8 Susceptibilities -- 11.9 Eigenvalues and Eigenfunctions -- 12. Statistical Properties of Laser Light -- 12.1 Semiclassical Laser Equations -- 12.2 Stationary Solution and Its Expectation Values -- 12.3 Expansion in Eigenmodes -- 12.4 Expansion into a Complete Set; Solution by Matrix Continued Fractions -- 12.5 Transient Solution -- 12.6 Photoelectron Counting Distribution -- Appendices -- A1 Stochastic Differential Equations with Colored Gaussian Noise -- A2 Boltzmann Equation with BGK and SW Collision Operators -- A3 Evaluation of a Matrix Continued Fraction for

the Harmonic Oscillator -- A4 Damped Quantum-Mechanical Harmonic Oscillator -- A5 Alternative Derivation of the Fokker-Planck Equation -- A6 Fluctuating Control Parameter -- S. Supplement to the Second Edition -- S.1 Solutions of the Fokker-Planck Equation by Computer Simulation (Sect. 3.6) -- S.2 Kramers-Moyal Expansion (Sect. 4.6) -- S. 3 Example for the Covariant Form of the Fokker-Planck Equation (Sect. 4.10) -- S.4 Connection to Supersymmetry and Exact Solutions of the One Variable Fokker-Planck Equation (Chap. 5) -- S.5 Nondifferentiability of the Potential for the Weak Noise Expansion (Sects. 6.6 and 6.7) -- S.6 Further Applications of Matrix Continued-Fractions (Chap. 9) -- S.7 Brownian Motion in a Double-Well Potential (Chaps. 10 and 11) -- S.8 Boundary Layer Theory (Sect. 11.4) -- S.9 Calculation of Correlation Times (Sect. 7.12) -- S.10 Colored Noise (Appendix A1) -- S.11 Fokker-Planck Equation with a Non-Positive-Definite Diffusion Matrix and Fokker-Planck Equation with Additional Third-Order-Derivative Terms -- References.

Sommario/riassunto

This book deals with the derivation of the Fokker-Planck equation, methods of solving it and some of its applications. Various methods such as the simulation method, the eigenfunction expansion, numerical integration, the variational method, and the matrix continued-fraction method are discussed. This is the first time that this last method, which is very effective in dealing with simple Fokker-Planck equations having two variables, appears in a textbook. The methods of solution are applied to the statistics of a simple laser model and to Brownian motion in potentials. Such Brownian motion is important in solid-state physics, chemical physics and electric circuit theory. This new study edition is meant as a text for graduate students in physics, chemical physics, and electrical engineering.