Contents of the bibliography gragra.bib

[1] I. J. Aalbersberg, A. Ehrenfeucht, and G. Rozenberg. On the membership problem for regular DNLC grammars. *Discrete Applied Mathematics*, 13:79–85, 1986.

[2] IJsbrand Aalbersberg, Joost Engelfriet, and Grzegorz Rozenberg. Restricting the Complexity of Regular DNLC Languages. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 147–166. Springer-Verlag, 1987.

[3] Ijsbrand Jan Aalbersberg, Joost Engelfriet, and Grzegorz Rozenberg. The complexity of regular DNLC graph languages. *Journal of Computer and System Sciences*, 40:376–404, 1990.

[4] N. Abe, M. Mizumoto, J.-I. Toyoda, and K. Tanaka. Web grammars and several graphs. *Journal of Computer and System Sciences*, 7:37–65, 1973.

[5] Norihiro Abe, Masaharu Mizumoto, Junı́chi Toyoda, and Kohkichi Tanaka. Web grammars and several graphs. *Journal of Computer and System Sciences*, 7(1):37–65, 1973.

[6] S. Abraham. Compound and serial grammars. *Information and Control*, 20(5):431–438, 1972.

[7] Jiří Adámek, Horst Herrlich, and George Strecker. *Abstract and Concrete Categories.* John Wiley, New York, 1990.

[8] R. Alberich, P. Burmeister, F. Rosselló, G. Valiente, and B. Wojdyto. A partial algebras approach to graph transformation. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 1–15. Springer, 1996.

[9] Ricardo Alberich, Peter Burmeister, Francesc Rosselló, Gabriel Valiente, and Boleslaw Wojdylo. A Partial Algebras Approach to Graph Transformation. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 1–15. Springer-Verlag, 1996.

[10] B. Alpern, A. Carle, and B. Rosen. Incremental evaluation of attributed graphs. Technical Report CS 87-29, Brown University, 1987.

[11] M. Anderson, P. Cheng, and V. Haarslev, editors. *Theory and Application of Diagrams*, volume 1889 of *LNAI*. Springer, 2000. contains some graph grammar related contributions.

[12] S. Anderson. *Graph Theory and Finite Combinatorics.* Markham, Chicago, 1970.

[13] M. Andries. *Graph Rewrite Systems and Visual Database Languages.* PhD thesis, Rijks-Universiteit te Leiden, 1996.

[14] Marc Andries and Gregor Engels. Syntax and semantics of hybrid database languages. In Hans Jürgen Schneider and Hartmut Ehrig, editors, *Graph Transformations in Computer Science*, volume 776 of *Lecture Notes in Computer Science*, pages 19–36, 1994.

[15] Marc Andries, Gregor Engels, Annegret Habel, Berthold Hoffmann, Hans-Jörg Kreowski, Sabine Kuske, Detlef Plump, Andy Schürr, and Gabriele Taentzer. Graph transformation for specification and programming. 1996. In preparation.

[16] Marc Andries, Gregor Engels, Annegret Habel, Berthold Hoffmann, Hans-Jörg Kreowski, Sabine Kuske, Detlef Plump, Andy Schürr, and Gabriele Taentzer. Graph transformation for specification and programming. Report 7/96, Univ. Bremen, 1996.

[17] Marc Andries and Jan Paredaens. A language for generic graph-transformations. In G. Schmidt and R. Berghammer, editors, *Graph-Theoretic Concepts in Computer Science*, volume 570 of *Lecture Notes in Computer Science*, pages 63–74, 1992.

[18] Michael A. Arbib and Ernest G. Manes. *Arrows, Structures, and Functors*. Academic Press, New York, 1975.

[19] Michael A. Arbib and Ernest G. Manes. Partially-Additive Monoids, Graph-Growing, and the Algebraic Semantics of Recursive Calls. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 127–138. Springer-Verlag, 1979.

[20] Zena M. Ariola, Jan Willem Klop, and Detlef Plump. Confluent rewriting of bisimilar term graphs. In *Proc. Fourth Workshop on Expressiveness in Concurrency*, volume 7 of *Electronic Notes in Theoretical Computer Science*. Elsevier, 1997. URL: `http://www.elsevier.nl/locate/entcs/volume7.html`.

[21] Zena M. Ariola, Jan Willem Klop, and Detlef Plump. Bisimilarity in term graph rewriting. Report SEN-R9801, CWI, Amsterdam, 1998.

[22] R. Arlt and M. Röder. Grundlegende datenstrukturen und algorithmen zur implementierung von algebraischen graphgrammatiken, 1989. Studienarbeit.

[23] S. Arnborg, Bruno Courcelle, A Proskurowski, and D. Seese. An algebraic theory of graph reduction. Technical Report LaBRI TR 90–02, Univ. Bordeaux, 1990.

[24] Stefan Arnborg. Efficient algorithms for combinatorial problems on graphs with bounded decomposability — A survey. *BIT*, 25:2–33, 1985.

[25] Stefan Arnborg and Proskurowski Andrzej. A technique for recognizing graphs of bounded treewidth with application to subclasses of partial 2-paths. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 469–486. Springer, 1996.

[26] Stefan Arnborg, D. G. Corneil, and Andrzej Proskurowski. Complexity of finding embeddings in a k-tree. *SIAM Journal of Alg. and Discrete Methods*, 8:277–284, 1987.

[27] Stefan Arnborg, Bruno Courcelle, Andrzej Proskurowski, and Detlef Seese. An Algebraic Theory of Graph Reduction. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 70–83. Springer-Verlag, 1991.

[28] Stefan Arnborg, Bruno Courcelle, Andrzej Proskurowski, and Detlef Seese. An algebraic theory of graph reduction. *Journal of the ACM*, 40:1134–1164, 1993.

[29] Stefan Arnborg, Jens Lagergren, and Detlef Seese. Problems easy for tree-decomposable graphs. In T. Lepistö and A. Salomaa, editors, *Automata, Languages and Programming*, volume 317 of *Lecture Notes in Computer Science*, pages 38–51, 1988.

[30] Stefan Arnborg, Jens Lagergren, and Detlef Seese. Problems easy for tree-decomposable graphs. *Journal of Algorithms*, 12:308–340, 1991.

[31] Stefan Arnborg and Andrzej Proskurowski. Characterization and recognition of partial k-trees. *Congressus Numerantium*, 47:69–76, 1985.

[32] Stefan Arnborg and Andrzej Proskurowski. Characterization and recognition of partial 3-trees. *SIAM Journal of Alg. and Discrete Methods*, 7:305–314, 1986.

[33] Stefan Arnborg and Andrzej Proskurowski. A Technique for Recognizing Graphs of Bounded Treewidth with Application to Subclasses of Partial 2-Paths. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 469–486. Springer-Verlag, 1996.

[34] Uwe Aßmann. On Edge Addition Rewrite Systems and their Relevance to Program Analysis. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 321–335. Springer-Verlag, 1996.

[35] G. Ausiello and P. Atzeni, editors. *Proc. Int. Conf. on database theory*, volume 243 of *Lecture Notes in Computer Science*. Springer-Verlag, 1986.

[36] J. Avenhaus. *Reduktionssysteme. Rechnen und Schließen in gleichunsdefinierten Strukturen.* Springer-Verlag, Berlin, 1995.

[37] Duane A. Bailey, Janice E. Bailey, and Charles D. Fischer. Programming with very large graphs. In H. Ehrig, H.-J. Kreowski, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 84–97, 1991.

[38] Duane A. Bailey and Janice E. Cuny. Graph Grammar based Specification of Interconnection Structures for Massively Parallel Computation. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 73–85. Springer-Verlag, 1987.

[39] Duane A. Bailey, Janice E. Cuny, and Charles D. Fischer. Programming with Very Large Graphs. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 84–97. Springer-Verlag, 1991.

[40] B. Baker. Tree transducers and tree languages. *Information and Control*, 37(2):241–266, 1978.

[41] B. S. Baker. Approximation algorithms for NP-complete problems on planar graphs. In *Proc. 24th Ann. Symp. on Foundations of Comp. Sci.*, pages 265–273, Los Angeles, 1983. IEEE Comp. Society.

[42] Richard Banach. The Contractum in Algebraic Graph Rewriting. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 16–26. Springer-Verlag, 1996.

[43] Hendrik Barendregt, Marko van Eekelen, John Glaubert, Richard Kennaway, Rinus Plasmeijer, and Ronan Sleep. Term graph rewriting. In J. W. de Bakker, A. J. Nijman, and P. C. Treleaven, editors, *PARLE'87*, volume 259 of *Lecture Notes in Computer Science*, pages 141–158, 1987.

[44] L. Baresi, A. Orso, and M. Pezze. Introducing formal specification methods in industrial practice. In *ICSE'97 Proceedings of the 19th International Conference on Software Engineering*, pages 56–66. IEEE Computer Society Press, 1997.

[45] K. Barthelmann. *Graphgrammatikalische Hilfsmittel zur Beschreibung verteilter Systeme.* PhD thesis, IMMD Erlangen, 1991. In German.

[46] Klaus Barthelmann. *Graphgrammatikalische Hilfsmittel zur Beschreibung verteilter Systeme.* PhD thesis, Erlangen, 1990.

[47] Klaus Barthelmann. Describing Göttler's Operational Graph Grammars with Pushouts. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 98–112. Springer-Verlag, 1991.

[48] Klaus Barthelmann. Process Specification and Verification. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 225–239. Springer-Verlag, 1996.

[49] B. Bartsch. Inferenz und analyse spezieller graph-grammatiken für die syntaktische muster-erkennung. Technical Report 6, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1980.

[50] B. Bartsch-Spörl. Grammatical Inference of Graph Grammars for Syntactic Pattern Recognition. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 1–7. Springer-Verlag, 1983.

[51] C. Batini and A. D'Atri. Schema hypergraphs: A formalism to investigate logical data base design. In H. Noltemeier, editor, *Graph-Theoretic Concepts in Computer Science*, volume 100 of *Lecture Notes in Computer Science*, pages 177–194, 1981.

[52] C. Batini, G. di Battista, and G. Santucci. Multilevel schema integration. In R. Elmasri, V. Kouramajian, and B. Thalheim, editors, *12th International Conference on the Entity Relationship Approach*, volume 823 of *Lecture Notes in Computer Science*, pages 327–338, Berlin, 1994. Springer-Verlag.

[53] Carlo Batini and Alessandro D'Atri. Rewriting Systems as a Tool for Relational Data Base Design. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 139–154. Springer-Verlag, 1979.

[54] M. Bauderon and H. Jacquet. Categorical product as a generic graph rewriting mechanism. Technical Report 1166–97, LaBRI, University of Bordeaux, 1996. Submitted to J.A.C.T.S.

[55] Michel Bauderon. On systems of equations defining infinite graphs. In J. van Leeuwen, editor, *Graph-Theoretic Concepts in Computer Science*, volume 344 of *Lecture Notes in Computer Science*, pages 54–73, 1989.

[56] Michel Bauderon. General Solution to a System of Recursive Equations on Hypergraphs. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 113–126. Springer-Verlag, 1991.

[57] Michel Bauderon. Infinite hypergraphs I. Basic properties. *Theoretical Computer Science*, 82:177–214, 1991.

[58] Michel Bauderon. Infinite hypergraphs II. Systems of recursive equations. *Theoretical Computer Science*, 103:165–190, 1992.

[59] Michel Bauderon. A uniform approach to graph rewriting: The pullback approach. In Manfred Nagl, editor, *Graph-Theoretic Concepts in Computer Science*, volume 1017 of *Lecture Notes in Computer Science*, pages 101–115, 1995.

[60] Michel Bauderon. A Category-Theoretical Approach to Vertex Replacement: The Generation of Infinite Graphs. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 27–37. Springer-Verlag, 1996.

[61] Michel Bauderon and Bruno Courcelle. An algebraic formalism for graphs. In P. Franchi-Zannettacci, editor, *CAAP '86*, volume 214 of *Lecture Notes in Computer Science*, pages 74–84, 1986.

[62] Michel Bauderon and Bruno Courcelle. Graph expressions and graph rewriting. *Mathematical Systems Theory*, 20:83–127, 1987.

[63] M. von der Beeck. *Ein Kontrollmodell für die Strukturierte Analyse.* Dissertation, Lehrstuhl für Informatik III, RWTH Aachen, 1995.

[64] Claude Berge. *Graphs and Hypergraphs.* North Holland, Amsterdam, 1973.

[65] F. Berman and G. Shannon. Edge grammars: Decidability results and formal language issues. In *Proc. of the 22nd Allerton Conference on Communication, Control and Computing*, pages 921–930, Urbana, Illinois, 1984.

[66] M. W. Bern, E. L. Lawler, and A. L. Wong. Why certain subgraph computations require only linear time. In *Proc. 26th Symp. on Foundations of Computer Science (FOCS '85)*, pages 117–125, 1985.

[67] M. W. Bern, E. L. Lawler, and A. L. Wong. Linear time computation of optimal subgraphs of decomposable graphs. *Journal of Algorithms*, 8:216–235, 1987.

[68] M. Berthold and I. Fischer. Modelling neural networks with graph transformation systems. In *Proceedings of the 1997 IEEE International Joint Conference on Neural Networks*, volume 1, pages 275–280, Houston, Texas, June 1997.

[69] M. Beyer. Gag: ein graphischer editor für algebraische graphgrammatik-systeme. Master's thesis, Fachbereich Informatik, Technische Universität Berlin, 1991.

[70] Martin Beyer. *AGG 1.0 – Kurzanleitung*, 1992.

[71] Martin Beyer. *AGG 1.0 – Tutorial*, 1992.

[72] Martin Beyer. *AGG, An Algebraic Graph Grammar System, User's Manual*, 1993.

[73] Michel Billaud, Pierre Lafon, Yves, Métivier, and Eric Sopena. Graph rewriting systems with priorities. In M. Nagl, editor, *Graph-Theoretic Concepts in Computer Science*, volume 411 of *Lecture Notes in Computer Science*, pages 94–106, 1990.

[74] V. Blödel and F. Wankmüller. Graph languages defined by systems of forbidden structures: A survey. In H. Göttler and H. J. Schneider, editors, *Graph-Theoric Concepts in Computer Science, International Workshop WG'87*, number 314 in Lecture Notes in Computer Science, pages 46–58. Springer-Verlag, 1987.

[75] R. Bloem and J. Engelfriet. Characterization of properties and relations defined in monadic second order logic on the nodes of trees. Tech.Report 97–03, Leiden University, August 1997.

[76] R. Bloem and J. Engelfriet. Monadic second order logic and node relations on graphs and trees. In J. Mycielski, G. Rozenberg, and A. Salomaa, editors, *Structures in Logic and Computer Science*, volume 1261 of *Lecture Notes in Computer Science*, pages 144–161. Springer-Verlag, 1997.

[77] D. Blostein, H. Fahmy, and A. Grbavec. Practical use of graph rewriting. Technical Report 95-373, Queen's University, CDN, 1995.

[78] Dorothea Blostein, Hoda Fahmy, and Ann Grbavec. Issues in the Practical Use of Graph Rewriting. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 38–55. Springer-Verlag, 1996.

[79] H. L. Bodlaender. NC–algorithms for graphs with small tree-width. Report RUU–CS–88–4, Rijksuniversiteit Utrecht, vakgroep informatica, 1988.

[80] H. L. Bodlaender. Polynomial algorithms for graph isomorphism and chromatic index on partial k-trees. In R. Karlsson, A. Lingas, and G. Rozenberg, editors, *Proc. SWAT 88*, volume 318 of *Lecture Notes in Computer Science*, pages 223–232. Springer, 1988.

[81] H. L. Bodlaender and J. Engelfriet. Domino treewidth. *J. of Algorithms*, 24:94–123, 1997.

[82] Hans L. Bodlaender. Classes of graphs with bounded tree-width. Technical Report RUU-CS-86-22, Utrecht, 1986.

[83] Hans L. Bodlaender. Dynamic programming on graphs with bounded tree-width. In T. Lepistö and A. Salomaa, editors, *Automata, Languages and Programming*, volume 317 of *Lecture Notes in Computer Science*, pages 105–118, 1988.

[84] Hans L. Bodlaender. NC-algorithms for graphs with small tree-width. In J. van Leeuwen, editor, *Graph-Theoretic Concepts in Computer Science*, volume 344 of *Lecture Notes in Computer Science*, pages 1–10, 1989.

[85] Paul Boehm, Hartmut Ehrig, Udo Hummert, and Michael Löwe. Towards Distributed Graph-Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 86–98. Springer-Verlag, 1987.

[86] Paul Boehm, Harald-Reto Fonio, and Annegret Habel. Amalgamation of graph transformations with applications to synchronization. In H. Ehrig, C. Floyd, M. Nivat, and J. Thatcher, editors, *Mathematical Foundations of Software Development*, volume 185 of *Lecture Notes in Computer Science*, pages 267–283, 1985.

[87] Paul Boehm, Harald-Reto Fonio, and Annegret Habel. Amalgamation of graph transformations: A synchronization mechanism. *Journal of Computer and System Sciences*, 34:377–408, 1987.

[88] Martin J. M. De Boer. Construction of Map OL-Systems for Developmental Sequences of Plant Cell Layers. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 127–143. Springer-Verlag, 1991.

[89] Martin J. M. De Boer and Aristid Lindenmayer. Map OL-Systems with Edge Label Control: Comparison of Marker and Cyclic Systems. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 378–392. Springer-Verlag, 1987.

[90] C. Böhm and G. Jacopini. Flow diagrams, turing machines, and languages with only two formation rules. *Comm. ACM*, 19:366–371, 1966.

[91] P. Bonizzoni and G. della Vedova. An algorithm for the modular decomposition of hypergraphs. *Journal of Algorithms*, 2(32), Aug 1999.

[92] J. Börstler. *Programmieren im Großen: Sprachen, Werkzeuge Wiederverwendung.* PhD thesis, RWTH Aachen, 1994. In German.

[93] F. Bossut and F. Warin. Rationalité et reconnaissabilité dans les graphes acycliques. Ph.D., Univ. of Lille, 1986.

[94] A. Bottreau and Y. Métivier. Normal forms of graph rewriting, minor searching : two applications of enumeration. Technical report, LaBRI, 1997. submitted.

[95] Franz J. Brandenburg. On the complexity of the membership problem of graph grammars. In M. Nagl and J. Perl, editors, *Graph-Theoretic Concepts in Computer Science*, pages 40–49. Trauner Verlag, Linz, 1983.

[96] Franz J. Brandenburg. On Partially Ordered Graph-Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 99–111. Springer-Verlag, 1987.

[97] Franz J. Brandenburg. On polynomial time graph grammars. In R. Cori and M. Wirsing, editors, *STACS 88*, volume 294 of *Lecture Notes in Computer Science*, pages 227–236, 1988.

[98] Franz J. Brandenburg. The equivalence of boundary and confluent graph grammars on graph languages of bounded degree. In R. V. Book, editor, *Rewriting Techniques and Applications*, volume 488 of *Lecture Notes in Computer Science*, pages 312–322, 1991.

[99] Franz J. Brandenburg. Layout Graph Grammars: The Placement Approach. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 144–156. Springer-Verlag, 1991.

[100] Franz J. Brandenburg and Michal P. Chytil. Cycle Chain Code Picture Languages. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 157–173. Springer-Verlag, 1991.

[101] Franz J. Brandenburg and K. Skodinis. Graph Automata for Linear Graph Languages. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 336–350. Springer-Verlag, 1996.

[102] Franz J. Brandenburg and Konstantin Skodinis. Confluent eNCE Graph grammars and neighborhood preserving normal form, 1994.

[103] Franz J. Brandenburg and Kostantin Skodinis. Graph automata for linear graph languages. Submitted for publication, 1995.

[104] Franz Joseph Brandenburg and Kostantin Skodinis. Graph automata for linear languages. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 336–350. Springer, 1996.

[105] T. Brandes. *Formale Methoden zur Spezifikation automatischer Parallelisierung.* PhD thesis, Universität Marburg, 1988. In German.

[106] N. Breier. Parallel-rekursive graph-wort-funktionen. *Elektronische Informations-Verarbeitung und Kybernetik*, 23(4/5):171–179, 1987.

[107] W. Brendel, E. Grötsch, M. Nagl, and H.-J. Schneider. Graph-ersetzungs-systeme: Beiträge zur theorie, anwendung und implementierung. Technical Report 8, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1977.

[108] W. Brendel, M. Nagl, and T. Frühauf. Graph rewriting systems 2: Three papers on theory, application and implementation. Technical Report 1, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1976.

[109] R. Breu. *Algebraic Specification Techniques in Object-Oriented Programming Environments*, volume 562 of *Lecture Notes in Computer Science*. Springer-Verlag, 1991.

[110] M. Broy and S. Jähnichen, editors. *KORSO: Methods, Languages and Tools for the Construction of Correct Software*, volume 1009 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1995.

[111] J. Büchi. Weak second order logic and finite automata. *Z. Math. Logik, Grundlag. Math.*, 5:66–62, 1960.

[112] H. Bunke. Beschreibung eines syntax-gesteuerten inkrementellen compilers durch graph-grammatiken. Technical Report 7, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1974.

[113] H. Bunke. *Sequentielle und parallele Graph-Grammatiken.* Dissertation, Inst. f. math. Maschinen und Datenverarb. (IMMD), F.A.U. Erlangen, 1979.

[114] H. Bunke. Sequentielle und parallele programmierte graph-grammatiken. Technical Report 3, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1979.

[115] H. Bunke. Attributed programmed graph grammars and their application to schematic diagram interpretation. *IEEE pattern analysis and machine intelligence*, 4(6):574–582, 1982.

[116] Horst Bunke. Programmed Graph Grammars. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 155–166. Springer-Verlag, 1979.

[117] Horst Bunke. On the generative power of sequential and parallel programmed graph grammars. *Computing*, 29:89–112, 1982.

[118] Horst Bunke. Graph Grammars as a Generative Tool in Image Understanding. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 8–19. Springer-Verlag, 1983.

[119] Horst Bunke, T. Glauser, and T.-H. Tran. An Efficient Implementation of Graph Grammars based on the RETE Matching Algorithm. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 174–189. Springer-Verlag, 1991.

[120] Horst Bunke and B. Haller. A parser for context free plex grammars. In M. Nagl, editor, *Graph-Theoretic Concepts in Computer Science*, volume 411 of *Lecture Notes in Computer Science*, pages 136–150, 1990.

[121] P. Burmeister, M. Monserrat, F. Rossello, and G. Valiente. Algebraic transformation of unary partial algebras 2: Single pushout approach. *Theoretical Computer Science*, 216(1/2), 1999.

[122] Jack W. Carlyle, Sheila A. Greibach, and Azaria Paz. Complexity of Pattern Generation via Planar Parallel Binary Fission/Fusion Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 515–533. Springer-Verlag, 1987.

[123] Ilaria Castellani and Ugo Montanari. Graph Grammars for Distributed Systems. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 20–38. Springer-Verlag, 1983.

[124] Alfonso Catalano, Stefania Gnesi, and Ugo Montanari. Shortest Path Problems and Tree Grammars: An Algebraic Framework. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 167–179. Springer-Verlag, 1979.

[125] D. Caucal. An application of graph grammars to the elimination of redundancy from fonctions defined by schemes. In H. Erhig, H.-J. Kreowski, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science*, number 532 in Lecture Notes in Computer Science, pages 190–206. Springer-Verlag, 1991.

[126] Didier Caucal. An Application of Graph Grammars to the Elimination of Redundancy from Functions Defined by Schemes. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 190–206. Springer-Verlag, 1991.

[127] Didier Caucal. On the regular structure of prefix rewriting. *Theoretical Computer Science*, 106:61–86, 1992.

[128] S. Chang. Picture processing grammar and its applications. *Information Science*, 3(2):121–148, 1971.

[129] Gary Chartrand and Ortrud R. Oellermann. *Applied and Algorithmic Graph Theory*. McGraw-Hill, New York, 1993.

[130] Tien Chi Chen. Graphic Equivalence and Computer Optimization. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 207–220. Springer-Verlag, 1991.

[131] N. Chomsky. On certain formal properties of grammars. *Information and Control*, 2(2):137–167, 1959.

[132] Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors. *Graph Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, 1979.

[133] Collectif. Panel discussion: The use of graph grammars in application. In H. Ehrig, H.-J. Kreowski, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science*, number 532 in Lecture Notes in Computer Science, pages 41–60. Springer-Verlag, 1991.

[134] Mirko Conrad, Magdalena Gajewski, Rainer Holl-Biniasz, Michael Rudolf, Jochen Demuth, Stephan Weber, Reiko Heckel, Jürgen Müller, Gabriele Taentzer, and Annika Wagner. Graphische Spezifikation ausgewählter Teile von AGG – einem algebraischen Graphgrammatiksystem. Technical report 95-7, Technical University of Berlin, 1995.

[135] C. Cook. First order graph grammars. *SIAM Journal of Computing*, 3(1):90–99, 1974.

[136] C. R. Cook. First order graph grammars. *SIAM Journal on Computing*, 3:90–99, 1974.

[137] R. Cori and A. Machi. Construction of maps with prescribed automorphism group. *Theoretical Computer Science*, 21:91–98, 1982.

[138] A. Corradini and F. Drewes. (Cyclic) term graph rewriting is adequate for rational parallel term rewriting. Technical Report TR-97-14, Dipartimento di Informatica, Pisa, 1997.

[139] A. Corradini and F. Gadducci. A 2-categorical presentation of term graph rewriting. In *Proceedings CTCS'97*, volume 1290 of *LNCS*. Springer Verlag, 1997.

[140] A. Corradini and F. Gadducci. An algebraic presentation of term graphs, via ps-monoidal categories. Submitted for publication. Available at `http://www.di.unipi.it/~gadducci/papers/aptg.ps`, 1997.

[141] A. Corradini and R. Heckel, editors. *Workshop on Graph Transformation and Visual Modelling*. Carleton Scientific, 2000. Satellite to ICALP'2000. To appear.

[142] A. Corradini, R. Heckel, et al., editors. *The ICALP'2000 Workshops*, volume 8 of *Proceedings in Informatics*. Carleton Scientific, 2000. including the Workshop on Graph Transformation and Visual Modeling.

[143] A. Corradini and U. Montanari. An algebraic semantics for structured transition systems and its application to logic programs. *Theoretical Computer Science*, 1(103), 1992.

[144] A. Corradini, U. Montanari, F. Rossi, H. Ehrig, R. Heckel, and M. Löwe. Algebraic approaches to graph transformation I: Basic concepts and double pushout approach. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph transformation, Volume 1: Foundations*. World Scientific, 1997.

[145] Andrea Corradini, Hartmut Ehrig, Reiko Heckel, Martin Korff, Michael Löwe, Leila Ribeiro, and Anika Wagner. Algebraic approaches to graph transformation - part I: Single pushout approach and comparison with double pushout approach. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation. Vol. I: Foundations*, chapter 4, pages 247–312. World Scientific, 1997.

[146] Andrea Corradini, Hartmut Ehrig, Martin Löwe, Ugo Montanari, and Francesca Rossi. An event structure semantics for graph grammars with prallel productions. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 240–256. Springer, 1996.

[147] Andrea Corradini, Hartmut Ehrig, Michael Löwe, Ugo Montanari, and Julia Padberg. The Category of Typed Graph Grammars and its Adjunctions with Categories of Derivations. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 56–74. Springer-Verlag, 1996.

[148] Andrea Corradini, Hartmut Ehrig, Michael Löwe, Ugo Montanari, and Francesca Rossi. An Event Structure Semantics for Graph Grammars with Parallel Productions. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 240–256. Springer-Verlag, 1996.

[149] Andrea Corradini, Hartmut Ehrig, Michael Löwe, Ugo, Montanari, and Julia Padberg. Typed graph grammars and their adjunction with categories of derivations. Submitted for publication, 1995.

[150] Andrea Corradini, Hartmut Ehrig, Michael Löwe, Ugo, Montanari, and Francesca Rossi. Algebraic approach to graph transformations II: Models of computation in the double pushout approach. Submitted for publication, 1995.

[151] Andrea Corradini, Hartmut Ehrig, Ugo Montanari, and Julia Padberg. The category of typed graph grammars and its adjunction with categories of derivations. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 56–74. Springer, 1996.

[152] Andrea Corradini and Reiko Heckel. A compositional approach to structuring and refinement of typed graph grammars. In A. Corradini and U. Montanari, editors, *SEGRAGRA'95, Joint COMPUGRAPH/SEMAGRAPH Workshop on Graph Rewriting and Computation*, volume 2. Elsevier, 1995.

[153] Andrea Corradini, Ugo Montanari, Francesca Rossi, Hartmut Ehrig, Reiko Heckel, and Michael Löwe. Algebraic approaches to graph transformation - part I: Basic concepts and double pushout approach. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation. Vol. I: Foundations*, chapter 3, pages 163–246. World Scientific, 1997.

[154] Andrea Corradini, Ugo Montanari, Francesca Rossi, Hartmut Ehrig, and Michael Löwe. Graph Grammars and Logic Programming. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 221–237. Springer-Verlag, 1991.

[155] Andrea Corradini and Francesca Rossi. Hyperedge replacement jungle rewriting for term-rewriting systems and logic programming. *Theoretical Computer Science*, 109:7–48, 1993.

[156] Andrea Corradini and Francesca Rossi. A new term graph rewriting formalism: Hyperedge replacement jungle rewriting. In Ronan Sleep, Rinus Plasmeijer, and Marko van Eekelen, editors, *Term Graph Rewriting: Theory and Practice*, pages 101–115. John Wiley, New York, 1993.

[157] Andrea Corradini and Francesca Rossi. Synchronized Composition of Graph Grammar Productions. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 257–270. Springer-Verlag, 1996.

[158] Andrea Corradini, Francesca Rossi, and Francesco Parisi-Presicce. Logic programming as hypergraph rewriting. In *CAAP '91*, volume 493 of *Lecture Notes in Computer Science*, pages 275–295, 1991.

[159] Andrea Corradini and Dietmar Wolz. Jungle rewriting: an abstract description of a lazy narrowing machine. In Hans Jürgen Schneider and Hartmut Ehrig, editors, *Graph Transformations in Computer Science*, volume 776 of *Lecture Notes in Computer Science*, pages 119–137, 1994.

[160] G. Costagliola, A. de Lucia, S. Orefice, and G. Tortora. A parsing methodology for the implementation of visual systems. *IEEE Transactions on Software Engineering*, 12(23), 1997.

[161] B. Courcelle. Basic notions of universal algebra for language theory and graph grammars. *Theoretical Computer Science*, 163:1–54, 1996.

[162] B. Courcelle. The monadic second-order logic of graphs X: Linear orders. *Theoretical Computer Science*, 160:87–143, 1996.

[163] B. Courcelle. On the expression of graph properties in some fragments of monadic second-order logic. In N. Immerman and P.Kolaitis, editors, *Descriptive complexity and finite models*, volume 31, pages 33–62. DIMACS Series in Discrete Mathematics and Theoretical Computer Sciences, June 1997.

[164] B. Courcelle and G. Sénizergues. The obstructions of a minor-closed set of graphs defined by a hyperedge-replacement graph grammar can be constructed. *Discrete Mathematics*, 1996. In press.

[165] Bruno Courcelle. Fundamental properties of infinite trees. *Theoretical Computer Science*, 25:95–169, 1983.

[166] Bruno Courcelle. Equivalence and transformations of regular systems. applications to recursive program schemes and grammars. *Theoretical Computer Science*, 42:1–22, 1986.

[167] Bruno Courcelle. A Representation of Graphs by Algebraic Expressions and its Use for Graph Rewriting Systems. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 112–132. Springer-Verlag, 1987.

[168] Bruno Courcelle. An axiomatic definition of context-free rewriting and its application to NLC graph grammars. *Theoretical Computer Science*, 55:141–181, 1987.

[169] Bruno Courcelle. On Context-Free Sets of Graphs and Their Monadic Second-Order Theory. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 133–146. Springer-Verlag, 1987.

[170] Bruno Courcelle. An axiomatic definition of context-free rewriting and its application to NLC grammars. In R. Cori and M. Wirsing, editors, *STACS 88*, volume 294 of *Lecture Notes in Computer Science*, pages 237–247, 1988.

[171] Bruno Courcelle. The monadic second–order logic of graphs, III: tree–width, forbidden minors and complexity issues. Preprint, Université Bordeaux 1, 1988.

[172] Bruno Courcelle. Some applications of logic, of universal algebra,and of category theory to the theory of graph transformations. *Bull. EATCS*, 36:161–218, 1988.

[173] Bruno Courcelle. The monadic second-order logic of graphs: Definable sets of finite graphs. In J. van Leeuwen, editor, *Graph-Theoretic Concepts in Computer Science*, volume 344 of *Lecture Notes in Computer Science*, pages 30–53, 1989.

[174] Bruno Courcelle. The monadic second-order logic of graphs II: Infinite graphs of bounded width. *Mathematical Systems Theory*, 21:187–221, 1989.

[175] Bruno Courcelle. Graph rewriting: An algebraic and logic approach. In J. van Leeuwen, editor, *Handbook of Theoretical Computer Science*, volume B, pages 193–242. Elsevier, Amsterdam, 1990.

[176] Bruno Courcelle. The monadic second-order logic of graphs I: Recognizable sets of finite graphs. *Information and Computation*, 85:12–75, 1990.

[177] Bruno Courcelle. The monadic second-order logic of graphs IV: Definability properties of equational graphs. *Annals of Pure and Applied Logic*, 49:193–255, 1990.

[178] Bruno Courcelle. Graphs as Relational Structures: An Algebraic and Logical Approach. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 238–252. Springer-Verlag, 1991.

[179] Bruno Courcelle. The monadic second-order logic of graphs V: On closing the gap between definability and recognizability. *Theoretical Computer Science*, 80:153–202, 1991.

[180] Bruno Courcelle. Recursive queries and context-free graph grammars. *Theoretical Computer Science*, 78:217–244, 1991.

[181] Bruno Courcelle. The Logical Expression of Graph Properties (Abstract). In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 38–40. Springer-Verlag, 1991.

[182] Bruno Courcelle. Monadic second order definable graph transductions. In J.-C. Raoult, editor, *CAAP'92*, volume 581 of *Lecture Notes in Computer Science*, pages 124–144, 1992.

[183] Bruno Courcelle. The monadic second-order logic of graphs III: Tree-decompositions, minors and complexity issues. *RAIRO Theoretical Informatics and Applications*, 26:257–286, 1992.

[184] Bruno Courcelle. The monadic second-order logic of graphs VII: Graphs as relational structures. *Theoretical Computer Science*, 101:3–33, 1992.

[185] Bruno Courcelle. Context-free graph grammars: Separating vertex replacement from hyperedge replacement. In Z. Ésik, editor, *Fundamentals of Computation Theory*, volume 710 of *Lecture Notes in Computer Science*, pages 181–193, 1993.

[186] Bruno Courcelle. Graph grammars, monadic second-order logic and the theory of graph minors. In N. Robertson and P. Seymour, editors, *Graph Structure Theory*, volume 147 of *Contemporary Mathematics*, pages 565–590, 1993.

[187] Bruno Courcelle. Graph grammars, monadic second-order logic and the theory of graph minors. *Contemporary Mathematics*, 147:565–589, 1993.

[188] Bruno Courcelle. Monadic second-order definable graph transductions: A survey. *Theoretical Computer Science*, 126:53–75, 1994.

[189] Bruno Courcelle. Recognizable sets of graphs: Equivalent definitions and closure properties. *Mathematical Structures in Computer Science*, 4:1–32, 1994.

[190] Bruno Courcelle. The monadic second-order logic of graphs IX: Machines and their behaviours. *Theoretical Computer Science*, 151:125–162, 1995.

[191] Bruno Courcelle. The monadic second-order logic of graphs VI: On several representations of graphs by relational structures. *Discrete Applied Mathematics*, 1995. To appear.

[192] Bruno Courcelle. Structural properties of context-free sets of graphs generated by vertex replacement. *Information and Computation*, 116:275–293, 1995.

[193] Bruno Courcelle. The definition in monadic second-order logig of modular decompositions of ordered graphs. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 487–501. Springer, 1996.

[194] Bruno Courcelle. The expression of graph properties and graph transformations in monadic second-order logic. In G. Rozenberg, editor, *Handbook of Graph Rewriting. Vol. I: Foundations.* World Scientific, 1996. To appear.

[195] Bruno Courcelle. The Definition in Monadic Second-Order Logic of Modular Decompositions of Ordered Graphs. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 487–501. Springer-Verlag, 1996.

[196] Bruno Courcelle. The expression of graph properties and graph transformations in monadic second-order logic. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation. Vol. I: Foundations*, chapter 5, pages 313–400. World Scientific, 1997.

[197] Bruno Courcelle and Joost Engelfriet. A logical characterization of the sets of hypergraphs defined by hyperedge replacement grammars. *Mathematical Systems Theory*, 28:515–552, 1995.

[198] Bruno Courcelle, Joost Engelfriet, and Grzegorz Rozenberg. Context-Free Handle-Rewriting Hypergraph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 253–268. Springer-Verlag, 1991.

[199] Bruno Courcelle, Joost Engelfriet, and Grzegorz Rozenberg. Handle-rewriting hypergraph grammars. *Journal of Computer and System Sciences*, 46:218–270, 1993.

[200] Bruno Courcelle and P. Franchi-Zannettacci. Attribute grammars and recursive program schemes I and II. *Theoretical Computer Science*, 17:163–191, 235–257, 1982.

[201] Bruno Courcelle and Mohamed Mosbah. Monadic second order evaluations on tree-decomposable graphs. Technical Report LaBRI TR 90–110, Univ. Bordeaux, 1990.

[202] Bruno Courcelle and Mohamed Mosbah. Monadic second-order evaluations on tree-decomposable graphs. *Theoretical Computer Science*, 109:49–82, 1993.

[203] Bruno Courcelle and G. Sénizergues. The Obstructions of a Minor-Closed Set of Graphs Defined by Hyperedge Replacement can be Constructed. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 351–367. Springer-Verlag, 1996.

[204] K. Cremer. A tool supporting the re-design of legacy applications. In P. Nesi and F. Lehner, editors, *Proceedings of the 2nd Euromicro Conference on Software Maintenance and Re-Engineering*, pages 142–148. IEEE Computer Society Press, 1998.

[205] K. Cremer. *Graphbasierte Werkzeuge zum Reverse-Engineering und Re-Engineering*. PhD thesis, Fakultät für Mathematik, Naturwissenschaften und Informatik, Rheinisch-Westfälische Technische Hochschule Aachen, 1999. To be published by Deutscher Universitätsverlag, Wiesbaden.

[206] L. Csirmaz. Iterated grammars. *Acta Cybernetica*, 5:43–48, 1980.

[207] K. Culik II and A. Lindenmayer. Parallel rewriting on graphs and multidimensional development. *Int. Journ. of General Systems*, 3:53–66, 1976.

[208] K. Culik II and D. Wood. A mathematical investigation of propagating graph OL systems. *Information and Control*, 43:50–82, 1979.

[209] Janice Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors. *Graph Grammars and Their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*. Springer, 1996.

[210] F. d'Amore, P. Franciosa, and A. Marchetti-Spaccamela, editors. *WG'96: 22nd International Workshop on Graph Theoretic Concepts in Computer Science*, volume 1197 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1996. Continuation of the WG *Fachtagung*.

[211] J. Dassow. On some extensions of russian parallel context-free grammars. *Acta Cybernetica*, 6:355–360, 1983.

[212] J. Dassow and G. Paun. *Regulated rewriting in formal language theory*, volume 18 of *EATCS Monographs*. Springer-Verlag, 1989.

[213] Jürgen Dassow. Graph-theoretic properties and chain code picture languages. *Journal of Information Processing and Cybernetics EIK*, 25:423–433, 1989.

[214] Jürgen Dassow, Annegret Habel, and Stefan Taubenberger. Chain-code pictures and collages generated by hyperedge replacement. In *Graph Grammars and Their Application to Computer Science*, Lecture Notes in Computer Science, 1995. To appear.

[215] Jürgen Dassow, Annegret Habel, and Stefan Taubenberger. Chain-Code Pictures and Collages Generated by Hyperedge Replacement. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 412–427. Springer-Verlag, 1996.

[216] Gnanamalar David, Frank Drewes, and Hans-Jörg Kreowski. Hyperedge replacement with rendezvous. In P. Jouannaud, editor, *Theory and Practice of Software Development*, volume 668 of *Lecture Notes in Computer Science*, pages 167–181, 1993.

[217] Mark de Does and Aristid Lindenmayer. Algorithms for the Generation and Drawing of Maps Representing Cell Clones. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 39–57. Springer-Verlag, 1983.

[218] P. Degano and Ugo Montanari. A model of distributed systems based of graph rewriting. *Journal of the ACM*, 34:411–449, 1987.

[219] Ernst Dehnert, Reinhold Franck, and W. Streng. PLAN2D — towards a two-dimensional programming language. volume 26 of *Lecture Notes in Computer Science*, pages 202–213, 1975.

[220] P. Della Vigna and C. Ghezzi. Context free graph grammars. *Information and Control*, 37:207–233, 1978.

[221] P. della Vigna and C. Ghezzi. Context free graph grammars. *Information and Control*, 37(2):207–233, 1978.

[222] Pierluigi Della Vigna and Carlo Ghezzi. Context-free graph grammars. *Information and Control*, 37:207–233, 1978.

[223] T. DeMarco. *Structured Analysis and System Specification*. Yourdon Press, New York, NY, 1979.

[224] M. D. Derk and L. S. DeBrunner. Reconfiguration Graph Grammar for Massively Parallel, Fault Tolerant Computers. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 185–195. Springer-Verlag, 1996.

[225] M.D. Derk and L.S. DeBrunner. Reconfiguration graph grammars for massively parallel, fault tolerant computers. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 185–195. Springer, 1996.

[226] R. Diestel. *Graph Decompositions: A Study in Infinite Graph Theory*. Oxford University Press, Oxford, 1990.

[227] Wolfgang Ditt, Hans-Jörg Kreowski, and H. Weber. A graph grammar approach to conceptual database schemata definition. Technical Report 247/88, University of Dortmund, 1988.

[228] J. Doner. Tree acceptors and some of their applications. *Journal of Computer and System Sciences*, 4:406–451, 1970.

[229] H. Dörr. Monitoring with graph-grammars as formal operational models. Technical Report 92-19-27, Institut fur Informatik, Freie Universität Berlin, Germany, 1992.

[230] Heiko Dörr. Bypass strong V-structures and find an isomorphic labelled subgraph in linear time. In W. Mayr, Ernst, Gunter Schmidt, and Gottfried Tinhofer, editors, *Graph-Theoretic Concepts in Computer Science*, volume 903 of *Lecture Notes in Computer Science*, pages 305–318, 1995.

[231] Heiko Dörr. *Efficient Graph Rewriting and its Implementation*, volume 922 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1995. Doctoral dissertation.

[232] F. Drewes. Parsing ordered graphs generated by hyperedge replacement. Report 10/90, Univ. Bremen, 1990.

[233] F. Drewes. Unique decompositions of hypergraphs. Report 14/90, Univ. Bremen, 1990.

[234] F. Drewes. Recognising k–connected hypergraphs in cubic time. Report 3/91, Univ. Bremen, 1991.

[235] Frank Drewes. A lower bound on the growth of functions computed by tree transducers. Report 4/93, Univ. Bremen, 1993.

[236] Frank Drewes. NP-completeness of k-connected hyperedge-replacement languages of order k. *Information Processing Letters*, 45:89–94, 1993.

[237] Frank Drewes. Recognising k–connected hypergraphs in cubic time. *Theoretical Computer Science*, 109:83–122, 1993.

[238] Frank Drewes. Transducibility—symbolic computation by tree-transducers. Technical report, Bremen, 1993.

[239] Frank Drewes. A lower bound on the growth of functions computed by tree transductions. In S. Tison, editor, *Proc. CAAP 94*, volume 787 of *Lecture Notes in Computer Science*, pages 100–114. Springer, 1994. Revised version to appear in *Fundamenta Informaticae*.

[240] Frank Drewes. The use of tree transducers to compute translations between graph algebras. Report 8/94, Univ. Bremen, 1994.

[241] Frank Drewes. Semirings and tree-to-graph-to-tree transductions. In A. Corradini and U. Montanari, editors, *Proc. Joint COMPUGRAPH/SEMAGRAPH Workshop on Graph Rewriting and Computation (SEGRAGRA '95)*, volume 2, page 8 pages. Elsevier Science, 1995.

[242] Frank Drewes. Computation by tree transductions. Doctoral dissertation, University of Bremen, Germany, 1996.

[243] Frank Drewes. Language theoretic and algorithmic properties of d-dimensional collages and patterns in a grid. *Journal of Computer and System Sciences*, 53(1):33–60, 1996.

[244] Frank Drewes. A lower bound on the growth of functions computed by tree transducers. *Fundamenta Informaticae*, 26:267–286, 1996. Short version in LNCS 787 (CAAP 94).

[245] Frank Drewes. On the connectedness of pictures defined by iterated function systems. In J. Dassow, G. Rozenberg, and A. Salomaa, editors, *Proc. 2nd Intl. Conference on Developments in Language Theory—At the Crossroads of Mathematics, Computer Science and Biology*, pages 289–298, Singapore, 1996. World Scientific.

[246] Frank Drewes. The Use of Tree Transducers to Compute Translations between Graph Algebras. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 196–210. Springer-Verlag, 1996.

[247] Frank Drewes. A characterization of the sets of hypertrees generated by hyperedge-replacement graph grammars. Report 3/97, Univ. Bremen, 1997.

[248] Frank Drewes. On the generation of trees by hyperedge replacement. In I. Prívara and P. Ružička, editors, *Proc. Mathematical Foundations of Computer Science 1997*, volume 1295 of *Lecture Notes in Computer Science*, pages 229–238, 1997.

[249] Frank Drewes and Joost Engelfriet. Decidability of the finiteness of ranges of tree transductions. Report 9/96, Univ. Bremen, 1996.

[250] Frank Drewes, Annegret Habel, and Hans-Jörg Kreowski. Hyperedge replacement graph grammars. In G. Rozenberg, editor, *Handbook of Graph Transformations. Vol. I: Foundations*. World Scientific, 1996. To appear.

[251] Frank Drewes, Annegret Habel, and Hans-Jörg Kreowski. Hyperedge replacement graph grammars. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation. Vol. I: Foundations*, chapter 2, pages 95–162. World Scientific, 1997.

[252] Frank Drewes, Annegret Habel, Hans-Jörg Kreowski, and Stefan Taubenberger. Generating self-affine fractals by collage grammars. Report 3/93, Univ. Bremen, 1993.

[253] Frank Drewes, Annegret Habel, Hans-Jörg Kreowski, and Stefan Taubenberger. A sketch of collage grammars. *Bulletin of the EATCS*, 50:209–219, 1993.

[254] Frank Drewes, Annegret Habel, Hans-Jörg Kreowski, and Stefan Taubenberger. Generating self-affine fractals by collage grammars. In G. Rozenberg and A. Salomaa, editors, *Proc. Developments in Language Theory 93. At the Crossroads of Mathematics, Computer Science and Biology*, pages 278–289. World Scientific, 1994. Long version in *Theoretical Computer Science* 145.

[255] Frank Drewes, Annegret Habel, Hans-Jörg Kreowski, and Stefan Taubenberger. Generating self-affine fractals by collage grammars. *Theoretical Computer Science*, 145:159–187, 1995.

[256] Frank Drewes and Hans-Jörg Kreowski. A Note on Hyperedge Replacement. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 1–11. Springer-Verlag, 1991.

[257] Frank Drewes and Hans-Jörg Kreowski. (Un-)decidability of geometric properties of pictures generated by collage grammars. *Fundamenta Informaticae*, 25:295–325, 1996.

[258] Frank Drewes, Hans-Jörg Kreowski, and S. Kuske. Hyperedge replacement: A basis for efficient graph algorithms. In M. Beyer, H. Ehrig, and M. Löwe, editors, *Computing by Graph Transformation (COMPUGRAPH) — Survey, Results, and Applications*, 1992. Project brochure.

[259] Frank Drewes, Hans-Jörg Kreowski, and Denis Lapoire. Criteria to disprove context-freeness of collage languages. In B.S. Chlebus and L. Czaja, editors, *Proc. Fundamentals of Computation Theory XI*, volume 1279 of *Lecture Notes in Computer Science*, pages 169–178, 1997.

[260] Frank Drewes, Hans-Jörg Kreowski, and Nils Schwabe. COLLAGE-ONE: A system for evaluation and visualisation of collage grammars. In *Proc. 4th International Conference on Computer Graphics & Image Processing GKPO'96*, volume 5 of *Machine Graphics & Vision*, pages 393–402, Warsaw, Poland, 1996. Polish Academy of Sciences.

[261] J. Early. An efficient context-free parsing algorithm. *Communications of the Association for Computing Machinery*, 13(2):94–102, 1970.

[262] A. Ehrenfeucht, T. Harju, and Grzegorz Rozenberg. Group Based Graph Transformations and Hierarchical Representations of Graphs. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 502–520. Springer-Verlag, 1996.

[263] A. Ehrenfeucht, T. Harju, and Grzegorz Rozenberg. 2-structures - a framework for decomposition and transformation of graphs. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation. Vol. I: Foundations*, chapter 6, pages 401–478. World Scientific, 1997.

[264] A. Ehrenfeucht, M. Main, and Grzegorz Rozenberg. Restrictions on NLC graph grammars. *Theoretical Computer Science*, 31:211–223, 1984.

[265] H.-D. Ehrich and V. G. Lohberger. Constructing Specifications of Abstract Data Types by Replacements. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 180–191. Springer-Verlag, 1979.

[266] H. Ehrig. Introduction to graph grammars with applications to semantic networks. *Computer Mathematical Applications*, 23(6-9):557–5572, 1992.

[267] H. Ehrig. Flex: a flexible extension and integration concept for software development in korso and compass. Technical Report 93-17, Technische Universität Berlin, 1993.

[268] H. Ehrig and G. Engels. Towards a module concept for graph transformation system: the software engineering perspective. Technical report, Universitat de les Illes Balears, Palma de Mallorca,Mar94, 1995.

[269] H. Ehrig, G. Engels, R. Heckel, and G. Taentzer. A combined reference model and view based approach to system specification. *International Journal of Software and Knowledge Engineering*, 7(4):457–477, 1997. Special Issue on Graph Transformation.

[270] H. Ehrig, R. Heckel, M. Korff, M. Löwe, L. Ribeiro, A. Wagner, and A. Corradini. Algebraic approaches to graph transformation II: Single pushout approach and comparison with double pushout approach. In G. Rozenberg, editor, *The Handbook of Graph Grammars and Computing by Graph Transformation, Volume 1: Foundations*. World Scientific, 1997.

[271] H. Ehrig, M. Korff, and M. Löwe. Tutorial introduction to the algebraic approach of graph grammars based on double and single pushouts. Technical Report 90/21, Technische Universität Berlin, 1990.

[272] H. Ehrig, Hans-Jörg Kreowski, and G. Taentzer. Canonical derivations for high-level replacement sytems. Submitted, 1993.

[273] H. Ehrig, M. Nagl, and H.-J. Schneider. Three papers on graph rewriting systems and their applications. Technical Report 1, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1975.

[274] H. Ehrig and G. Taentzer, editors. *GRATRA'2000 Joint APPLIGRAPH and GETGRATS Workshop on Graph Transformation Systems*, number 2000-2 in Forschungsberichte des Fachbereichs Informatik, 2000. Satellite to ETAPS'2000. Contains about 30 Original Papers and 5 Cross References to Graph Grammar related ETAPS'2000 Contributions.

[275] H. Ehrig and K. Tischer. Graph grammars for the specialization of organisms. In *Proceedings of the Conference on Biologically motivated Automata Theory*, pages 158–165, 1974. MITRE Corp. McLean Va.

[276] Hartmut Ehrig. Embedding theorems in the algebraic theory of graph grammars. In M. Karpiński, editor, *Fundamentals of Computation Theory*, volume 56 of *Lecture Notes in Computer Science*, pages 245–255, 1977.

[277] Hartmut Ehrig. Introduction to the algebraic theory of graph grammars. In V. Claus, H. Ehrig, and G. Rozenberg, editors, *Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 1–69, 1979.

[278] Hartmut Ehrig. Introduction to the Algebraic Theory of Graph Grammars (A Survey). In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 1–69. Springer-Verlag, 1979.

[279] Hartmut Ehrig. Aspects of Concurrency in Graph Grammars. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 58–81. Springer-Verlag, 1983.

[280] Hartmut Ehrig. Tutorial Introduction to the Algebraic Approach of Graph-Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 3–14. Springer-Verlag, 1987.

[281] Hartmut Ehrig and Gregor Engels. Pragmatic and semantic aspects of a module concept for graph transformation systems. Submitted for publication, 1995.

[282] Hartmut Ehrig and Gregor Engels. Pragmatic and Semantic Aspects of a Module Concept for Graph Transformation Systems. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 137–154. Springer-Verlag, 1996.

[283] Hartmut Ehrig and Annegret Habel. Concurrent transformations of graphs and relational structures. In *Graph-Theoretic Concepts in Computer Science*, pages 76–88. Trauner Verlag, Linz, 1983.

[284] Hartmut Ehrig and Annegret Habel. Graph grammars with application conditions. In G. Rozenberg and A. Salomaa, editors, *The Book of L*, pages 87–100. Springer-Verlag, Berlin, 1986.

[285] Hartmut Ehrig, Annegret Habel, and Hans-Jörg Kreowski. Introduction to graph grammars with applications to semantic networks. *Computers & Mathematics with Applications*, 23 (6-9):557–572, 1992.

[286] Hartmut Ehrig, Annegret Habel, Hans-Jörg Kreowski, and Francesco Parisi-Presicce. From Graph Grammars to High Level Replacement Systems. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 269–291. Springer-Verlag, 1991.

[287] Hartmut Ehrig, Annegret Habel, Hans-Jörg Kreowski, and Francesco Parisi-Presicce. Parallelism and concurrency in high level replacement systems. *Mathematical Structures in Computer Science*, 1:361–404, 1991.

[288] Hartmut Ehrig, Annegret Habel, and Barry K. Rosen. Concurrent transformations of relational structures. *Fundamenta Informaticae*, IX:13–50, 1986.

[289] Hartmut Ehrig, Reiko Heckel, Martin Korff, Leila Ribeiro, and Annika Wagner. Algebraic approach to graph transformations 1: Tutorial introduction and single-pushout approach. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation, Volume 1: Foundations*. World Scientific, 1996.

[290] Hartmut Ehrig, Martin Korff, and Michael Löwe. Tutorial Introduction to the Algebraic Approach of Graph Grammars based on Double and Single Pushouts. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 24–37. Springer-Verlag, 1991.

[291] Hartmut Ehrig and Hans-Jörg Kreowski. Church-Rosser theorems leading to parallel and canonical derivations in graph grammars. Technical Report 75-27, Berlin, 1975.

[292] Hartmut Ehrig and Hans-Jörg Kreowski. Parallel graph grammars. In A. Lindenmayer and G. Rozenberg, editors, *Automata, Languages, Development*, pages 425–442. North Holland, Amsterdam, 1976.

[293] Hartmut Ehrig and Hans-Jörg Kreowski. Parallelism of manipulations in multidimensional information structures. In A. Mazurkiewicz, editor, *Mathematical Foundations of Computer Science*, volume 45 of *Lecture Notes in Computer Science*, pages 284–293, 1976.

[294] Hartmut Ehrig and Hans-Jörg Kreowski. Pushout-properties: An analysis of gluing constructions for graphs. *Mathematische Nachrichten*, 91:135–149, 1979.

[295] Hartmut Ehrig and Hans-Jörg Kreowski. Applications of graph grammar theory to consistency, synchronization and scheduling in data base systems. *Information Systems*, 5:225–238, 1980.

[296] Hartmut Ehrig, Hans-Jörg Kreowski, Andrea Maggiolo-Schettini, Barry K. Rosen, and Józef Winkowski. Transformations of structures: An algebraic approach. *Mathematical Systems Theory*, 14:305–334, 1981.

[297] Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors. *Graph Grammars and Their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, 1991.

[298] Hartmut Ehrig, Hans-Jörg Kreowski, and Gabriele Taentzer. Canonical derivatiopns for high-level replacement systems. In Hans Jürgen Schneider and Hartmut Ehrig, editors, *Graph Transformations in Computer Science*, volume 776 of *Lecture Notes in Computer Science*, pages 153–169, 1994.

[299] Hartmut Ehrig and Axel Liedtke. Locally Star Gluing Formulas for a Class of Parallel Graph Grammars. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 206–223. Springer-Verlag, 1979.

[300] Hartmut Ehrig and Michael Löwe. Computing by Graph Transformation: Overall Aims and New Results. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 688–703. Springer-Verlag, 1991.

[301] Hartmut Ehrig and Michael Löwe. Categorical principles, techniques and results for high-level-replacement systems in computer science. *Applied Categorical Structures*, 1:21–50, 1993.

[302] Hartmut Ehrig and Michael Löwe. The ESPRIT basic research working group COMPUGRAPH "computing by graph transformation": A survey. *Theoretical Computer Science*, 109:3–6, 1993.

[303] Hartmut Ehrig and Michael Löwe. Parallel and distributed derivations in the single-pushout approach. *Theoretical Computer Science*, 109:123–143, 1993.

[304] Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors. *Graph Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, 1983.

[305] Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors. *Graph Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, 1987.

[306] Hartmut Ehrig and Francesco Parisi-Presicce. Algebraic Specification Grammars: A Junction between Module Specifications and Graph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 292–310. Springer-Verlag, 1991.

[307] Hartmut Ehrig, M. Pfender, and H. J. Schneider. Graph grammars: An algebraic approach. In *IEEE Conf. on Automata and Switching Theory*, pages 167–180, Iowa City, 1973.

[308] Hartmut Ehrig and Barry K. Rosen. Commutativity of independent transformations on complex objects. IBM Research Report RC 6251, Yorktown Heights, 1976.

[309] Hartmut Ehrig and Barry K. Rosen. Concurrency of manipulation in multidimensional information structures. In J. Winkowski, editor, *Mathematical Foundations of Computer Science*, volume 64 of *Lecture Notes in Computer Science*, pages 165–176, 1978.

[310] Hartmut Ehrig and Barry K. Rosen. Commutativity, parallelism and concurrency for transformations of structures. Report 79-21, Berlin, 1979.

[311] Hartmut Ehrig and Barry K. Rosen. Decomposition of Graph Grammars, Productions and Derivations. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 192–205. Springer-Verlag, 1979.

[312] Hartmut Ehrig and Barry K. Rosen. The mathematics of record handling. *SIAM Journal on Computing*, 9(3):441–469, 1980.

[313] Hartmut Ehrig and Barry K. Rosen. Parallelism and concurrency of graph manipulations. *Theoretical Computer Science*, 11:247–275, 1980.

[314] Hartmut Ehrig and Grzegorz Rozenberg. Some definitional suggestions for parallel graph grammars. In A Lindenmayer and G. Rozenberg, editors, *Automata, Languages, Development*, pages 443–468. North Holland, Amsterdam, 1976.

[315] Hartmut Ehrig and J. Staples. Church-Rosser properties for graph replacement systems with unique splitting. In H. Ehrig, M. Nagl, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 82–101, 1983.

[316] Hartmut Ehrig and John Staples. Church-Rosser Properties for Graph Replacement Systems with Unique Splitting. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 82–101. Springer-Verlag, 1983.

[317] Hartmut Ehrig and Gabriele Taentzer. From parallel graph grammars to parallel high-level replacement systems. In G. Rozenberg and A. Salomaa, editors, *Lindenmayer Systems*, pages 283–304. Springer-Verlag, Berlin, 1992.

[318] Hartmut Ehrig and Karl Wilhelm Tischer. Graph grammars for the specialization of organisms. In *Proc. Conf. Biologocally Motivated Automata Theory*, pages 158–165, McLean, Va., 1974. MITRE Corp.

[319] Hartmut Ehrig and Karl Wilhelm Tischer. Graph grammars and applications to specialization and evolution in biology. *Journal of Computer and System Sciences*, 11:212–236, 1975.

[320] Gerard Ellis and Mark Willems. Analysing semantic networks using graph grammars. In *Working Notes for the AAAI Spring Symposium: Propositional Knowledge Representation*, Stanford University, March 25-27 1992.

[321] J. Engelfriet. Context-free graph grammars. In G. Rozenberg and A. Salomaa, editors, *Handbook of Formal Languages*, volume 3: Beyond Words. Springer-Verlag, 1997.

[322] J. Engelfriet and G. Rozenberg. Node replacement graph grammars. In G.Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation*, volume 1: Foundations. World Scientific, 1997.

[323] J. Engelfriet and H. Vogler. The equivalence of bottom-up and top-down tree-to-graph transducers. Technical Report TUD/FI96/17, Technical University of Dresden, October 1996.

[324] Joost Engelfriet. Context-free NCE graph grammars. In J. Csirik, J. Demetrovics, and F. Gécseg, editors, *Fundamentals of Computation Theory*, volume 380 of *Lecture Notes in Computer Science*, pages 148–161, 1989.

[325] Joost Engelfriet. A Characterization of Context-Free NCE Graph Languages by Monadic Second-Order Logic on Trees. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 311–327. Springer-Verlag, 1991.

[326] Joost Engelfriet. A regular characterization of graph languages definable in monadic second-order logic. *Theoretical Computer Science*, 88:139–150, 1991.

[327] Joost Engelfriet. A Greibach normal form for context-free graph grammars. In W. Kuich, editor, *Automata, Languages and Programming*, volume 623 of *Lecture Notes in Computer Science*, pages 138–149, 1992.

[328] Joost Engelfriet. Graph grammars and tree transducers. In S. Tison, editor, *CAAP'94*, volume 787 of *Lecture Notes in Computer Science*, pages 15–36, 1994.

[329] Joost Engelfriet. Context-free graph grammars. In G. Rozenberg and A. Salomaa, editors, *Handbook of Formal Languages. Vol. III: Beyond Words*, chapter 3, pages 125–213. Springer, 1997.

[330] Joost Engelfriet and L. Heyker. The string generating power of context–free hypergraph grammars. Report 89-05, Univ. Leiden, 1989.

[331] Joost Engelfriet and Linda Heyker. Hypergraph languages of bounded degree. Technical Report 91-01, Leiden, 1991.

[332] Joost Engelfriet and Linda Heyker. The string generating power of context-free hypergraph grammars. *Journal of Computer and System Sciences*, 43:328–360, 1991.

[333] Joost Engelfriet and Linda Heyker. The Term Generating Power of Context-Free Hypergraph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 328–343. Springer-Verlag, 1991.

[334] Joost Engelfriet and Linda Heyker. Context-free hypergraph grammars have the same term-generating power as attribute grammars. *Acta Informatica*, 29:161–210, 1992.

[335] Joost Engelfriet and Linda Heyker. Hypergraph languages of bounded degree. *Journal of Computer and System Sciences*, 48:58–89, 1994.

[336] Joost Engelfriet, Linda Heyker, and George Leih. Context-free graph languages of bounded degree are generated by apex graph grammars. *Acta Informatica*, 31:341–378, 1994.

[337] Joost Engelfriet and G. Leih. Complexity of boundary graph languages. Report 88-07, Univ. Leiden, 1988.

[338] Joost Engelfriet and George Leih. Nonterminal bounded NLC graph grammars. *Theoretical Computer Science*, 59:309–315, 1988.

[339] Joost Engelfriet and George Leih. Linear graph grammars: Power and complexity. *Information and Computation*, 81:88–121, 1989.

[340] Joost Engelfriet and George Leih. Complexity of boundary graph languages. *RAIRO Theoretical Informatics and Applications*, 24:267–274, 1990.

[341] Joost Engelfriet, George Leih, and Grzegorz Rozenberg. Apex Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 167–185. Springer-Verlag, 1987.

[342] Joost Engelfriet, George Leih, and Grzegorz Rozenberg. Apex graph-grammars and attribute grammars. *Acta Informatica*, 25:537–571, 1988.

[343] Joost Engelfriet, George Leih, and Grzegorz Rozenberg. Nonterminal separation in graph grammars. *Theoretical Computer Science*, 82:95–111, 537–571, 1991.

[344] Joost Engelfriet, George Leih, and Emo Welzl. Characterization and complexity of boundary graph languages. Manuscript, 1987.

[345] Joost Engelfriet, George Leih, and Emo Welzl. Boundary graph grammars with dynamic edge relabeling. *Journal of Computer and System Sciences*, 40:307–345, 1990.

[346] Joost Engelfriet and Grzegorz Rozenberg. A comparison of boundary graph grammars and context-free hypergraph grammars. *Information and Computation*, 84:163–206, 1990.

[347] Joost Engelfriet and Grzegorz Rozenberg. Graph Grammars Based on Node Rewriting: An Introduction to NLC Graph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 12–23. Springer-Verlag, 1991.

[348] Joost Engelfriet and Grzegorz Rozenberg. Node replacement graph grammars. In G. Rozenberg, editor, *Handbook of Graph Rewriting, Vol. I: Foundations*. World Scientific, 1996. To appear.

[349] Joost Engelfriet and Grzegorz Rozenberg. Node replacement graph grammars. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation. Vol. I: Foundations*, chapter 1, pages 1–94. World Scientific, 1997.

[350] Joost Engelfriet, Grzegorz Rozenberg, and Giora Slutzki. Tree transducers, L systems, and two-way machines. *Journal of Computer and System Sciences*, 20:150–202, 1980.

[351] Joost Engelfriet and E. Schmidt. IO and OI. *Journal of Computer and System Sciences*, 15:328–353, 1977. and Journal of Computer and System Sciences 16, 67-99, 1978.

[352] Joost Engelfriet and Jan J. Vereijken. Concatenation of Graphs. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 368–382. Springer-Verlag, 1996.

[353] Joost Engelfriet and Heiko Vogler. The translation power of top-down tree-to-graph transducers. *Journal of Computer and System Sciences*, 49:258–305, 1994.

[354] Joost Engelfriet and Heiko Vogler. The equivalence of bottom-up and top-down tree-to-graph transducers. Tech. Report TUD/FI96/17, TU Dresden, 1996.

[355] G. Engels. *Graphen als zentrale Datenstrukturen in einer Software-Entwicklungs-Umgebung*. PhD thesis, 1986. In German.

[356] G. Engels and M. Andries. A hybrid query language for an extended entity relationship model. *Journal of Visual Languages and Computing*, 7(3):321–352, 1996.

[357] G. Engels, H. Ehrig, R. Heckel, and G. Taentzer. A combined reference model- and view-based approach to system specification. *Int. Journal of Software and Knowledge Engeneering*, 1997. Accepted, to appear.

[358] G. Engels, R. Heckel, G. Taentzer, and H. Ehrig. A view-oriented approach to system modelling based on graph transformation. In *Proc. of ESEC/FSE'97, Zürich*, volume 1301 of *LNCS*. Springer Verlag, 1997.

[359] G. Engels, G. Rozenberg, G. Engels, and H.-J. Kreowski, editors. *6th International Workshop on Theory and Application of Graph Transformation*, volume 1764 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 2000.

[360] G. Engels and A. Schuerr. Encapsulated hierarchical graphs, graph types, and meta types. Technical Report 95-21, Departement of Computer Science, Leiden University, P.O. Box 9512, 2300 RA Leiden, The Netherlands, July 1995.

[361] Gregor Engels. *Graphen als zentrale Datenstrukturen in einer Software-Entwicklungsumgebung*. PhD thesis, Universität Osnabrück, 1986. VDI-Verlag.

[362] Gregor Engels. Elementary Actions on an Extended Entity-Relationship Database. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 344–362. Springer-Verlag, 1991.

[363] Gregor Engels, Rupert Gall, Manfred Nagl, and Wilhelm Schäfer. Software specification using graph grammars. *Computing*, 31:317–346, 1983.

[364] Gregor Engels, Martin Gogolla, Uwe Hohenstein, Klaus Hülsmann, Perdita Löhr-Richter, Gunter Saake, and Hans-Dieter Ehrich. Conceptual modelling of database applications using an extended ER model. *Data & Knowledge Engineering*, 9:157–204, 1992.

[365] Gregor Engels, Claus Lewerentz, Manfred Nagl, Wilhelm Schäfer, and Andy Schürr. Building integrated software developments part I: Tool specification. *ACM Transactions on Software Engineering and Methodology*, 1(2):135–167, 1992.

[366] Gregor Engels, Claus Lewerentz, and Wilhelm Schäfer. Graph-Grammar Engineering: A Software Specification Method. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 186–201. Springer-Verlag, 1987.

[367] Gregor Engels and Wilhelm Schäfer. Graph grammar engineering: A method used for the development of the integrated programming support environment. In H. Ehrig, C. Floyd, M. Nivat, and J. Thatcher, editors, *Formal Methods and Software Development*, volume 186 of *Lecture Notes in Computer Science*, pages 179–193, 1985.

[368] Gregor Engels and Wilhelm Schäfer. *Programmentwicklungsumgebungen: Konzepte und Realisierung*. Teubner, Stuttgart, 1989.

[369] Gregor Engels and Andy Schuerr. Encapsulated hierachical graphs, graph types, and meta types. In *SEGRAGRA'95, Joint COMPUGRAPH/SEMAGRAPH Workshop on Graph Rewriting and Computation*, volume 2 of *Electronic Notes in Theoretical Computer Science*. Elsevier, 1995.

[370] Shimon Even. *Graph Algorithms*. Computer Science Press, Rockville, Maryland, 1979.

[371] S. E. Fahlman, D. S. Touretzky, and W. van Roggen. Cancellation in a parallel semantique network. In *Proceedings of the Seventh International Joint Conference on Artificiale Intellingence, IJCAI'81*, 1981.

[372] H. Fahmy and B. Blostein. A graph grammar programming style for recognition of music notation. *Machine Vision and Application*, 6(2):83–99, 1993.

[373] D. Farber, R. Griswold, and J. Polonsky. Snobol: a string manipulation language. *Journal of the ACM*, 11:21–30, 1964.

[374] R. Farrow, K. Kennedy, and L. Zucconi. Graph grammars and global program data flow analysis. In *Proc. 17th Ann. IEEE Symp. on Found. of Comp. Sci.*, pages 42–56, Houston, 1976.

[375] Jerome Feder. Languages of encoded line patterns. *Information and Control*, 13:230–244, 1968.

[376] Jerome Feder. Plex languages. *Information Sciences*, 3:225–241, 1971.

[377] I. Fischer, M. Koch, and M. Berthold. Proving properties of neural networks with graph transformations. In *Proceedings of the 1998 IEEE World Congress on Computational Intelligence*, volume 1, pages 441–446, Anchorage, Alaska, May 1998.

[378] Ingrid Fischer. *Modelling Neural Networks with Graph Transformations*. PhD thesis, University of Erlangen-Nuremberg, December 1998. Technical Report, IMMD, University of Erlangen–Nuremberg, volume 31, Nr. 11.

[379] Patrick Fitzhorn. A Linguistic Formalism for Engineering Solid Modeling. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 202–215. Springer-Verlag, 1987.

[380] M. Flasiński. Characteristics of edNLC-graph grammar for syntactic pattern recognition. *Computer Vision, Graphics, and Image Processing*, 47:1–21, 1989.

[381] Mariusz Flasinski. Parsing of edNLC-graph grammars for scene analysis. *Pattern Recognition*, 21:623–629, 1988.

[382] Mariusz Flasinski. Distorted pattern analysis with the help of node label controlled graph languages. *Pattern Recognition*, 23:765–774, 1990.

[383] Mariusz Flasinski. On the parsing of deterministic graph languages for syntactic pattern recognition. *Pattern Recognition*, 26:1–16, 1993.

[384] Mariusz Flasinski. Use of graph grammars for the description of mechanical parts. *Computer Aided Design*, 27:403–433, 1995.

[385] Harald-Reto Fonio. Amalgamation of graph transformations with application to synchronization in distributed systems, 1984. Master thesis, Berlin.

[386] F. David Fracchia. Integrating Lineage and Interaction for the Visualization of Cellular Structures. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 521–535. Springer-Verlag, 1996.

[387] F. David Fracchia and Przemyslaw Prusinkiewicz. Physically-Based Graphical Interpretation of Marker Cellwork L-Systems. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 363–377. Springer-Verlag, 1991.

[388] Reinhold Franck. PLAN2D — syntactic analysis of precedence graph grammars. In *Proc. 3rd ACM Symp. on Principles of Programming Languages*, pages 134–139, Atlanta, 1976.

[389] Reinhold Franck. A class of linearly parsable graph grammars. *Acta Informatica*, 10:175–201, 1978.

[390] R. Freund and B. Haberstroh. Attributed elementary programmed graph grammars. In G. Schmidt and R. Berghammer, editors, *Graph-Theoric Concepts in Computer Science, 17th International Workshop, WG'91, Fishbachau, Germany*, number 643 in Lecture Notes in Computer Science, pages 75–84. Springer-Verlag, 1991.

[391] K. S. Fu and T. L. Booth. Grammatical inference: Introduction and survey — part I and II. *IEEE-Transactions on Systems, Man and Cybernetics*, 5:95–111 and 409–423, 1975.

[392] Z. Fülöp. On attributed tree transducers. *Acta Cybernetica*, 5:261–280, 1980.

[393] A. L. Furtado. Transformations of Data Base Structures. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 224–236. Springer-Verlag, 1979.

[394] A. L. Furtado and P. A. S. Veloso. Specification of Data Bases through Rewriting Rules. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 102–114. Springer-Verlag, 1983.

[395] A. Gabrielian and S. Ginsburg. Grammar schemata. *Journal of the ACM*, 21:213–226, 1974.

[396] H. Gaifman. On local and non-local properties. In J. Stern, editor, *Proc. of the Herbrand Symposium, Logic Colloquium '81*, pages 105–135. North Holland Pub. Co., 1982.

[397] R. Gall. *Formale Beschreibung des inkrementellen Programmierens im Großen mit Graphgrammatiken.* PhD thesis, IMMD Erlangen, 1983. In German.

[398] Ferenc Gécseg and Magnus Steinby. *Tree Automata.* Akadémiai Kiadó, Budapest, 1984.

[399] H. J. Genrich, Dirk Janssens, Grzegorz Rozenberg, and P. S. Thiagarajan. Petri Nets and their Relation to Graph Grammars. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 115–129. Springer-Verlag, 1983.

[400] S. Gerber and H. Hoyer. Ersetzung in fragmentarischen graphen. *Elektronische Informations-Verarbeitung und Kybernetik*, 21(7/8):385–400, 1985.

[401] D. Gernert. Graph grammars as an analytical tool in physics and biology. *BioSystems*, 43:179–187, 1997.

[402] Alan Gibbons. *Algorithmic Graph Theory.* Cambridge University Press, Cambridge, 1985.

[403] S. Ginsburg. *The Mathematical Theory of Context-Free Languages.* McGraw-Hill, New York, 1966.

[404] S. Ginsburg. A survey of grammar forms. *Acta Cybernetica*, 3:296–280, 1976.

[405] James Gips. *Shape Grammars and Their Uses, Artificial Perception, Shape Generation and Computer Aesthetics.* Birkhäuser Verlag, Basel, 1975.

[406] John Glaubert, Richard Kennaway, and Ronan Sleep. DACTL: An experimental graph rewriting language. In H. Ehrig, H.-J. Kreowski, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 378–395, 1991.

[407] John Glauert, Richard Kennaway, and Ronan Sleep. Dactl: An Experimental Graph Rewriting Language. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 378–395. Springer-Verlag, 1991.

[408] J. Goldstine. A simplified proof of Parikh's theorem. *Discrete Mathematics*, 19:235–239, 1977.

[409] H. Göttler. Zweistufige graph-manipulations-systeme für die semantik von programmiersprachen. Technical Report 12, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1977.

[410] H. Göttler. Semantische modelle. Technical Report 2, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1980.

[411] H. Göttler. *Graphgrammatiken in der Softwaretechnik: Theorie und Anwendungen*, volume 178 of *Informatik-Fachberichte.* Springer-Verlag, Berlin, 1988. Venia Legendi Thesis (Habilitation).

[412] Herbert Göttler. Attributed Graph Grammars for Graphics. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 130–142. Springer-Verlag, 1983.

[413] Herbert Göttler. Graph-Grammars and Diagram Editing. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 216–231. Springer-Verlag, 1987.

[414] Herbert Göttler. *Graphgrammatiken in der Softwaretechnik*, volume 178 of *Informatik-Fachberichte.* Springer-Verlag, Berlin, 1988.

[415] Herbert Göttler, Joachim Günther, and Georg Nieskens. Use Graph Grammars to Design CAD-Systems! In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 396–410. Springer-Verlag, 1991.

[416] C. Gottlieb and A. Furtado. Data schemata based on directed graphs. Technical Report No.70, Dept. Comp. Sci., Univ. Toronto, 1974.

[417] C. Gottlieb and A. Furtado. Data schemata based on directed graphs. *International Journal of Computer and Information Sciences*, 8(1):39–74, 1979.

[418] S. Groh. Designing an efficient resource management for parallel distributed systems by the use of a graph replacement system. In *PDPTA'96 Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications*, pages 215–255, 1996.

[419] S. Groh. Resourcen-verwaltung in verteilten systemen mit manager-agenten am beispiel der speicherverwaltung. In O. Spaniol, editor, *Innovationsmotor Graduiertenkolleg*, volume 21 of *Aachener Beiträge zur Informatik*. Augustinus-Verlag, Aachen, 1997.

[420] Martin Grosse-Rhode, Francesco Parisi Presicce, and Marta Simeoni. A simple notion of refinement in graph transformation systems. Report 10/97, Univ. Roma 'La Sapienza', 1997.

[421] Martin Grosse-Rhode, Francesco Parisi Presicce, and Marta Simeoni. Spatial and temporal refinement of typed graph transformation systems. Report 11/97, Univ. Roma 'La Sapienza', 1997.

[422] E. Grötsch and B. Jahn. Vergleichende studie über parallele ersetzung markierter graphen. eine studie zur implementierung von graphgrammatiken unter verwendung von assoziativ-verarbeitung. Technical Report 6, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1976.

[423] Eberhard Grötsch and Manfred Nagl. Explicit versus Implicit Parallel Rewriting on Graphs. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 237–254. Springer-Verlag, 1979.

[424] GRRR, 2000. Yet another Graph Transformation System on the web.

[425] S. Gruner. *Eine schematische und grammatische Korrespondenz-Methode zur Spezifikation konsistent verteilter Daten-Modelle*. PhD thesis, Fakultät für Mathematik, Naturwissenschaften und Informatik, Rheinisch-Westfälische Technische Hochschule Aachen, 1999. Preface by T. Pratt. Published by Shaker-Verlag Aachen.

[426] S. Gruner, M. Kurt, and G. Taentzer. A visual modeling technique for controling graph transformations. Satellite to ICALP'2000. To be published by Carleton Scientific, 2000.

[427] S. Gruner, M. Nagl, and A. Schürr. Integration tools supporting development processes. In M. Broy and B. Rumpe, editors, *RTSE'97 Workshop on Requirements Targeting Software and Systems Engineering*, volume 1526 of *Lecture Notes in Computer Science*, pages 235–256, Berlin, 1998. Springer-Verlag.

[428] J. Gruska. Generalized context free grammars. *Acta Cybernetica*, 2:35–38, 1973.

[429] R. Guha and R. Yeh. Perdiodic representation of equal matrix grammars. *Information and Control*, 23(5):435–446, 1973.

[430] Annegret Habel. Concurrency in Graph-Grammatiken. Technical Report 80-11, Berlin, 1980.

[431] Annegret Habel. Komposition und Dekomposition von Produktionen zur Manipulation von Graphen, 1981. Master thesis, Berlin.

[432] Annegret Habel. Graph-theoretic properties compatible with graph derivations. In J. van Leeuwen, editor, *Proc. Graph-Theoretic Concepts in Computer Science (WG'88)*, volume 344 of *Lecture Notes in Computer Science*, pages 11–29. Springer, 1989.

[433] Annegret Habel. *Hyperedge Replacement: Grammars and Languages*. PhD thesis, Bremen, 1989.

[434] Annegret Habel. *Hyperedge Replacement: Grammars and Languages*, volume 643 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1992.

[435] Annegret Habel. Hypergraph grammars: Transformational and algorithmic aspects. *Journal of Information Processing and Cybernetics EIK*, 28:241–277, 1992.

[436] Annegret Habel, Reiko Heckel, and Gabriele Taentzer. Graph grammars with negative application conditions. *Fundamenta Informaticae*, 26(3/4):287–313, 1996.

[437] Annegret Habel and Renate Klempien-Hinrichs. On the replacement of atomic units in hypergraphs, 1996.

[438] Annegret Habel and Hans-Jörg Kreowski. On Context-Free Graph Languages Generated by Edge Replacement. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 143–158. Springer-Verlag, 1983.

[439] Annegret Habel and Hans-Jörg Kreowski. Characteristics of graph languages generated by edge replacement. *Theoretical Computer Science*, 51:81–115, 1987.

[440] Annegret Habel and Hans-Jörg Kreowski. May we Introduce to you: Hyperedge Replacement. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 15–26. Springer-Verlag, 1987.

[441] Annegret Habel and Hans-Jörg Kreowski. Some structural aspects of hypergraph languages generated by hyperedge replacement. In F. Brandenburg, G. Vidal-Naquet, and M. Wirsing, editors, *STACS 87*, volume 247 of *Lecture Notes in Computer Science*, pages 207–219, 1987.

[442] Annegret Habel and Hans-Jörg Kreowski. Pretty patterns produced by hyperedge replacement. In H. Göttler and H. J. Schneider, editors, *Graph-Theoretic Concepts in Computer Science*, volume 314 of *Lecture Notes in Computer Science*, pages 32–45, 1988.

[443] Annegret Habel and Hans-Jörg Kreowski. Formale Graph-Sprachen (Teil 1). Material zur gleichnamigen Lehrveranstaltung im Wintersemester 1989/90, Bremen, 1989.

[444] Annegret Habel and Hans-Jörg Kreowski. Collages and patterns generated by hyperedge replacement. Technical Report 15/90, Bremen, 1990.

[445] Annegret Habel and Hans-Jörg Kreowski. Filtering hyperedge-replacement languages through compatible properties. In M. Nagl, editor, *Graph-Theoretic Concepts in Computer Science*, volume 411 of *Lecture Notes in Computer Science*, pages 107–120, 1990.

[446] Annegret Habel and Hans-Jörg Kreowski. Collage Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 411–429. Springer-Verlag, 1991.

[447] Annegret Habel, Hans-Jörg Kreowski, and Clemens Lautemann. A comparison of compatible, finite, and inductive graph properties. Report 7/89, Univ. Bremen, 1989.

[448] Annegret Habel, Hans-Jörg Kreowski, and Clemens Lautemann. A comparison of compatible, finite, and inductive graph properties. *Theoretical Computer Science*, 110:145–168, 1993.

[449] Annegret Habel, Hans-Jörg Kreowski, and Detlef Plump. Jungle evaluation. In D. Sannella and A. Tarlecki, editors, *Recent Trends in Data Type Specification*, volume 332 of *Lecture Notes in Computer Science*, pages 92–112, 1988.

[450] Annegret Habel, Hans-Jörg Kreowski, and Detlef Plump. Jungle evaluation. *Fundamenta Informaticae*, XV:37–60, 1991.

[451] Annegret Habel, Hans-Jörg Kreowski, and Stefan Taubenberger. Collages and patterns generated by hyperedge replacement. *Languages of Design*, 1:125–145, 1993.

[452] Annegret Habel, Hans-Jörg Kreowski, and Walter Vogler. Compatible graph properties are decidable for hyperedge replacement graph languages. *Bull. EATCS*, 33:55–62, 1987.

[453] Annegret Habel, Hans-Jörg Kreowski, and Walter Vogler. Decidable boundedness problems for hyperedge-replacement graph grammars. In J. Díaz and F. Orejas, editors, *TAPSOFT '89*, volume 351 of *Lecture Notes in Computer Science*, pages 275–289, 1989.

[454] Annegret Habel, Hans-Jörg Kreowski, and Walter Vogler. Metatheorems for decision problems on hyperedge replacement graph languages. *Acta Informatica*, 26:657–677, 1989.

[455] Annegret Habel, Hans-Jörg Kreowski, and Walter Vogler. Decidable boundedness problems for sets of graphs generated by hyperedge replacement. *Theoretical Computer Science*, 89:33–62, 1991.

[456] Annegret Habel, Hans-Jörg Kreowski, and Anne Wilharm. Bremen-town contributions to the third GRAGRA proceedings. Technical Report 4/87, Bremen, 1987.

[457] Annegret Habel and Detlef Plump. Unification, rewriting, and narrowing on term graphs. In *SEGRAGRA'95, Joint COMPUGRAPH/SEMAGRAPH Workshop on Graph Rewriting and Computation*, volume 2 of *Electronic Notes in Theoretical Computer Science*. Elsevier, 1995.

[458] Annegret Habel and Detlef Plump. Graph unification and matching. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 75–88. Springer, 1996.

[459] Annegret Habel and Detlef Plump. Term graph narrowing. *Mathematical Structures in Computer Science*, 6:649–676, 1996.

[460] Annegret Habel and Detlef Plump. Term graph narrowing. Report 14/96, Universität Hildesheim, 1996.

[461] Annegret Habel and Detlef Plump. Completeness of narrowing in non-copying implementations. Informatik-Bericht 19/97, Universität Hildesheim, Institut für Informatik, 1997.

[462] J. Hagauer. On form equivalence of deterministic pure grammar forms. *Theoretical Computer Science*, 18:69–87, 1982.

[463] J. Hage and T. Harju. The size of switching classes with skew gains. Tech.Report 97–02, Leiden University, Department of Computer Science, 1997.

[464] Frank Harary. *Graph Theory*. Addison-Wesley, Reading, Mass., 1969.

[465] David Harel. On visual formalisms. *Communications of the Association for Computing Machinery*, 31(5):514–530, 1988.

[466] Nora Hartsfield and Gerhard Ringel. *Pearls in Graph Theory. A Comprehensive Introduction.* Academic Press, Boston, 1990.

[467] R. Heckel, H. Ehrig, U. Wolter, and A. Corradini. Double-pullback transitions and coalgebraic loose semantics for graph transformation systems. *Applied Categorical Structures*, 1997. Submitted.

[468] R. Heckel, H. Ehrig, U. Wolter, and A. Corradini. Integrating the specification techniques of graph transformation and temporal logic. In *Proc. of MFCS'97, Bratislava*, volume 1295 of *LNCS*. Springer Verlag, 1997.

[469] R. Heckel, H. Ehrig, U. Wolter, and A. Corradini. Loose semantics and constraints for graph transformation systems. Technical Report 97-07, TU Berlin, 1997. `http://www.cs.tu-berlin.de/cs/ifb/TechnBerichteListe.html`.

[470] G. Heidenreich. *Ein generisches Organisationsschema der Konfigurationsverwaltung im Software-Engineering*. PhD thesis, Institut für mathematische Maschinen und Datenverarbeitung, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1999. Published as Technical Report IMMD 29/13.

[471] P. Heimann, G. Joeris, C.-A. Krapp, and B. Westfechtel. A programmed graph rewriting system for software process management. In *Proceedings Joint COMPUGRAPH/SEMAGRAPH Workshop on Graph Rewriting and Computation (SEGRAGRA '95)*, volume 2 of *Electronic Notes in Theoretical Computer Science*, 1995.

[472] P. Heimann, G. Jöris, C.-A. Krapp, and B. Westfechtel. Dynamite: Dynamic task nets for software process management. In *ICSE'96 Proceedings of the 18th International Conference on Software Engineering*, pages 331–341. IEEE Computer Society Press, 1996.

[473] R. Herbrecht. Ein Graphgrammatikeditor. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1989.

[474] Horst Herrlich and George Strecker. *Category Theory.* Allyn and Bacon, Boston, 1973.

[475] L. Hess and B. Mayoh. The four musicians: Analogies and experts systems. In H. Erhig, H.-J. Kreowski, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science*, number 532 in Lecture Notes in Computer Science, pages 430–445. Springer-Verlag, 1990.

[476] L. Hess and Brian H. Mayoh. Graphics and their Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 232–249. Springer-Verlag, 1987.

[477] L. Hess and Brian H. Mayoh. The Four Musicians: Analogies and Experts Systems—A Graphic Approach. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 430–445. Springer-Verlag, 1991.

[478] Wolfgang Hesse. Two-Level Graph Grammars. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 255–269. Springer-Verlag, 1979.

[479] B. Himmelreich. *Spezifikation von Zustand und Dynamik objekt-orientierter Datenbanken durch Graph-Grammatiken.* PhD thesis, Johannes-Gutenberg-Universität Mainz, 1995.

[480] Michael Himsolt. Entwicklung eines Grapheneditors, 1988. Master thesis, Universität Passau.

[481] Michael Himsolt. GraphEd: An interactive graph editor. In B. Monien and R. Cori, editors, *STACS'89*, volume 349 of *Lecture Notes in Computer Science*, pages 532–533, 1989.

[482] Michael Himsolt. *GraphEd User Manual*, 1990.

[483] Michael Himsolt. GraphEd: An Interactive Tool for Developing Graph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 61–65. Springer-Verlag, 1991.

[484] Michael Himsolt. *Konzeption und Implementierung von Grapheditoren.* PhD thesis, Universität Passau, 1993.

[485] Michael Himsolt. Hierarchical graphs for graph grammars, 1995.

[486] Renate Hinrichs. Konfluente Graphgrammatiken mit Einbettungstiefe $k > 1$, 1992. Master thesis, Universität Passau.

[487] Franz Hoefting, Egon Wanke, Aurel Balmoŝan, and Curd Bergmann. *1st Grade* — A system for implementation, testing and animation of graph algorithms. In P. Enjalbert, A. Finkel, and K. W. Wagner, editors, *STACS'93*, volume 665 of *Lecture Notes in Computer Science*, pages 606–607, 1993.

[488] F. Höfer. Inkrementelle Attributauswertung in Graphausdrücken. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1992.

[489] B. Hoffmann and D. Plump. Jungle evaluation for efficient term rewriting. In J. Grabowski et al., editor, *Algebraic and Logic Programming, Vol. 49*, pages 191–203, Berlin, 1989. Akademie-Verlag. Also in: Lecture Notes in Computer Science 343, 1989.

[490] Berthold Hoffmann. Modelling Compiler Generation by Graph Grammars. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 159–171. Springer-Verlag, 1983.

[491] Berthold Hoffmann and Detlef Plump. Implementing term rewriting by jungle evaluation. *RAIRO Theoretical Informatics and Applications*, 25(5):445–472, 1991.

[492] J. Hoffmann and M. G. Main. Results on NLC grammars with one-letter terminal alphabets. *Theoretical Computer Science*, 73:279–294, 1990.

[493] Uwe Hohenstein and Gregor Engels. SQL/EER — syntax and semantics of an entity-relationship-based query language. *Information Systems*, 17:209–242, 1992.

[494] J. Holle. Ein generator für integrierte werkzeuge am beispiel der objekt-relationalen datenbank-schema-integration. Master's thesis, Fachbereich Informatik, Universität-Gesamthochschule Paderborn, 1997.

[495] John E. Hopcroft and Robert E. Tarjan. Dividing a graph into triconnected components. *SIAM Journal on Computing*, 2(3):135–158, 1973.

[496] Günter Hotz, Reiner Kolla, and Paul Molitor. On Network Algebras and Recursive Equations. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 250–261. Springer-Verlag, 1987.

[497] J. Hromkovic and O. Sykora, editors. *WG'98: 24th International Workshop on Graph Theoretic Concepts in Computer Science*, volume 1517 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1998. Continuation of the WG *Fachtagung*. The Workshop Series continues also in 1999 and 2000, but seems to become less and less important for the Graph Transformation community who is about to establish more and more of its own conferences.

[498] S.E. Hudson. Incremental attribute evaluation: an algorithm for lazy evaluation in graphs. Technical Report 87-20, University of Arizona, 1987.

[499] Watts S. Humphrey. *Managing the Software Process*. SEI Series in Software Engineering. Addison Wesley, Reading, MA, 1989.

[500] Eero Hyvönen. Graph grammar approach to natural language parsing and understanding. In *Proc. 8th Internat. Joint Conf. on Artificial Intelligence*, pages 671–674. Kaufmann, 1983.

[501] Eero Hyvönen. Semantic parsing as graph language transformation: A multi-dimensional approach to parsing highly inflectional languages. In *COLING-84*, pages 517–520, 1984.

[502] M Jackel. *Formal Specification of Ada's Concurrent Constructs by Graph Grammars*. PhD thesis, Osnabrück, 1986.

[503] M. Jackel. *Formale Spezifikation konkurrierender ADA-konstrukte mit Graphgrammatiken*. Dissertation, Universität Osnabrück, 1986.

[504] M. Jackel. *Formale Spezifikation nebenläufiger Konstrukte von ADA mit Graphgrammatiken*. PhD thesis, Universität Osnabrück, 1986. In German.

[505] Manfred Jackel. ADA-Concurrency specified by Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 262–279. Springer-Verlag, 1987.

[506] J. Jahnke, W. Schäfer, and A. Zündorf. A design environment for migrating relational to object oriented database systems. In *Proceedings of the International Conference on Software Maintenance*, pages 163–170. IEEE Computer Society Press, 1996.

[507] D. Janin. Automata, tableaus and a reduction theorem for fixpoint calculi in arbitrary complete lattices. In *IEEE Symp. on Logic in Computer Science*, 1997.

[508] D. Janin. When the satisfiability problem for fixpoint expressions in complete ordered sets is simple. In *CSL'97*, 1997. Submitted to the proceedings.

[509] D. Janin and I. Walukiewicz. On the expressive completeness of the modal mu-calculus w.r.t. monadic second order logic. In *Proc. CONCUR'96*, volume 1119 of *Lecture Notes in Computer Science*, 1996.

[510] T. Janning. *Requirements Engineering und Programmieren im Großen*. Deutscher Universitäts-Verlag, Wiesbaden, 1992.

[511] T. Janning. *Requirements Engineering und Programmieren im Großen: Integration von Sprachen und Werkzeugen*. PhD thesis, Fakultät für Mathematik, Naturwissenschaften und Informatik, Rheinisch-Westfälische Technische Hochschule Aachen, 1992. Published by Deutscher Universitätsverlag, Wiesbaden.

[512] T. Janning and M. Lefering. Transformation of requirements engineering into design: the method and the tool. In *Proceedings of the 3rd International Workshop on Software Engineering and its Application*, pages 223–238, 1990.

[513] D. Janssens and N. Verlinden. Reasoning on graph-rewriting processes. Technical Report 97–07, University of Antwerp - UIA, dept. of Math. and Comp. Sci., 1997.

[514] Dirk Janssens. *Node Label Controlled Graph Grammars*. PhD thesis, Antwerp, 1983.

[515] Dirk Janssens. Equivalence of computations in actor grammars. *Theoretical Computer Science*, 109:145–180, 1993.

[516] Dirk Janssens. EMS systems and the composition of their computations. In Hans Jürgen Schneider and Hartmut Ehrig, editors, *Graph Transformations in Computer Science*, volume 776 of *Lecture Notes in Computer Science*, pages 203–217, 1994.

[517] Dirk Janssens. The decomposition of EMS computations. Submitted for publication, 1995.

[518] Dirk Janssens. The Decomposition of ESM Computations. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 271–287. Springer-Verlag, 1996.

[519] Dirk Janssens, Hans-Jörg Kreowski, Grzegorz Rozenberg, and Hartmut Ehrig. Concurrency of node-label-controlled graph transformations. Technical Report 82-38, Antwerp, 1982.

[520] Dirk Janssens, M. Lens, and Grzegorz Rozenberg. Computation graphs for actor grammars. *Journal of Computer and System Sciences*, 46:60–90, 1993.

[521] Dirk Janssens and T. Mens. Abstract semantics for ESM systems. *Fundamenta Informaticae*, XXVII, 1996. To appear.

[522] Dirk Janssens and Grzegorz Rozenberg. On the structure of node-label-controlled graph languages. *Information Sciences*, 20:191–216, 1980.

[523] Dirk Janssens and Grzegorz Rozenberg. Restrictions, extensions and variations of NLC grammars. *Information Sciences*, 20:217–244, 1980.

[524] Dirk Janssens and Grzegorz Rozenberg. A characterization of context-free string languages by directed node label controlled graph grammars. *Acta Informatica*, 16:63–85, 1981.

[525] Dirk Janssens and Grzegorz Rozenberg. Decision problems for node label controlled graph grammars. *Journal of Computer and System Sciences*, 22:144–177, 1981.

[526] Dirk Janssens and Grzegorz Rozenberg. Decision problems for node label controlled graph grammars. volume 22 of *Lecture Notes in Computer Science*, pages 144–177. Springer, 1981.

[527] Dirk Janssens and Grzegorz Rozenberg. Graph grammars with neighbourhood-controlled embedding. *Theoretical Computer Science*, 21:55–74, 1982.

[528] Dirk Janssens and Grzegorz Rozenberg. Graph Grammars with Node-Label Controlled Rewriting and Embedding. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 186–205. Springer-Verlag, 1983.

[529] Dirk Janssens and Grzegorz Rozenberg. Hypergraph Systems Generating Graph Languages. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 172–185. Springer-Verlag, 1983.

[530] Dirk Janssens and Grzegorz Rozenberg. A survey of NLC grammars. In G. Ausiello and M. Protasi, editors, *CAAP '83*, volume 159 of *Lecture Notes in Computer Science*, pages 114–128, 1983.

[531] Dirk Janssens and Grzegorz Rozenberg. Neighbourhood-uniform NLC grammars. *Computer Vision, Graphics, and Image Processing*, 35:131–151, 1986.

[532] Dirk Janssens and Grzegorz Rozenberg. Basic Notions of Actor Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 280–298. Springer-Verlag, 1987.

[533] Dirk Janssens and Grzegorz Rozenberg. Actor grammars. *Mathematical Systems Theory*, 22:75–107, 1989.

[534] Dirk Janssens and Grzegorz Rozenberg. Structured Transformations and Computation Graphs for Actor Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 446–460. Springer-Verlag, 1991.

[535] Dirk Janssens, Grzegorz Rozenberg, and R. Verraedt. On sequential and parallel node rewriting graph grammars, part 1. *Computer Graphics and Image Processing*, 18:279–301, 1982.

[536] Dirk Janssens, Grzegorz Rozenberg, and R. Verraedt. On sequential and parallel node rewriting graph grammars, part 2. *Computer Graphics and Image Processing*, 23:295–312, 1983.

[537] Dirk Janssens, Grzegorz Rozenberg, and Emo Welzl. The bounded degree problem for NLC grammars is decidable. *Journal of Computer and System Sciences*, 33:415–422, 1986.

[538] Janice Jeffs. Embedding Rule Independent Theory of Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 299–308. Springer-Verlag, 1987.

[539] Eric Jeltsch and Hans-Jörg Kreowski. Grammatical Inference Based on Hyperedge Replacement. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 461–474. Springer-Verlag, 1991.

[540] C. V. Jones. An example based introduction to graph-based modeling. In *Proceedings of the Twenty-Third Annual Hawaii International Conference on the System Sciences*, pages 433–442, Los Alamitos (CA), 1990. IEEE Computer Society Press.

[541] C. V. Jones. An introduction to graph-based modeling systems, part I: Overview. *ORSA Journal on Computing*, 2(2):136–151, 1990.

[542] C. V. Jones. An introduction to graph-based modeling systems, part II: Graph-grammars and the implementation. *ORSA Journal on Computing*, 3(3):180–206, 1991.

[543] C. V. Jones. Attributed graphs, graph-grammars, and structured modeling. *Annals of OR*, 38:281–324, 1992.

[544] C. V. Jones. An integrated modeling environment based on attributed graphs and graph-grammars. *Decision Support Systems*, 10:255–275, 1993.

[545] C. V. Jones. Developments in graph-based modeling for decision support. *Decision Support Systems*, 13(1):61–74, 1995.

[546] C. V. Jones and K. D'Souza. Graph-grammars for minimum cost network flow modeling. Technical report, Faculty of Business Administration, Simon Fraser University, Burnaby (BC), V5A 1S6 CANADA, 1992.

[547] C. V. Jones and R. Krishnan. A visual, syntax-directed environment for automated model development. Technical report, Faculty of Business Administration, Simon Fraser University, Burnaby (BC), V5A 1S6 CANADA, 1992.

[548] Yoji Kajitani, Jun Dong Cho, and Majid Sarrafzadeh. New approximation results on graph matching and related problems. In W. Mayr, Ernst, Gunter Schmidt, and Gottfried Tinhofer, editors, *Graph-Theoretic Concepts in Computer Science*, volume 903 of *Lecture Notes in Computer Science*, pages 343–358, 1995.

[549] Simon M. Kaplan, Steven K. Goering, and Roy H. Campbell. Supporting the Software Development Process with Attributed NLC Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 309–325. Springer-Verlag, 1987.

[550] Simon M. Kaplan, Joseph. P. Loyall, and Steven K. Goering. Specifying Concurrent Languages and Systems with Δ-Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 475–489. Springer-Verlag, 1991.

[551] M. Kaul. *Syntax-Analyse bei Präzedenz-Graphgrammatiken.* PhD thesis, Universität Osnabrück, 1985. In German.

[552] M. Kaul. *Syntaxanalyse von Graphen durch Präzedenzgraphgrammatiken.* Dissertation, Universität Osnabrück, 1985.

[553] M. Kaul. *Syntaxanalyse von Graphen bei Präzedenz-Graph-Grammatiken.* PhD thesis, Passau, 1986.

[554] Manfred Kaul. Parsing of Graphs in Linear Time. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 206–218. Springer-Verlag, 1983.

[555] Manfred Kaul. Practical Applications of Precedence Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 326–342. Springer-Verlag, 1987.

[556] Richard Kennaway. On "On graph rewritings". *Theoretical Computer Science*, 52:37–58, 1987.

[557] Richard Kennaway. Implementing term rewrite languages in DACTL. *Theoretical Computer Science*, 72:225–249, 1990.

[558] Richard Kennaway. Graph Rewriting in Some Categories of Partial Morphisms. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 490–504. Springer-Verlag, 1991.

[559] Richard Kennaway, Jan Willem Klop, Ronan Sleep, and Jan de Vries. Transfinite reductions in orthogonal term rewriting systems (extended abstract). In Ronald V. Book, editor, *Rewriting techniquers and Applications*, volume 488 of *Lecture Notes in Computer Science*, pages 1–12, 1991.

[560] N. Kiesel, A. Schuerr, and B. Westfechtel. Design and evaluation of GRAS, a graph-oriented database system for engineering applications. Technical Report 92-44, Lehrstuhl fur Informatik III, Technical University of Aachen, Germany, 1992.

[561] N. Kiesel, A. Schürr, and B. Westfechtel. Design and evolution of gras, a graph oriented database system for engineering applications. In *CASE'93 Proceedings of the 6th International Workshop on Computer Aided Software Engineering*, pages 272–286. IEEE Computer Society Press, 1993.

[562] N. Kiesel, A. Schürr, and B. Westfechtel. Functionality and applications of a graph oriented software engineering database system. In *Proceedings of the Workshop on the Intersection between Databases and Software Engineering*, pages 64–68. IEEE Computer Society Press, 1995.

[563] N. Kiesel, A. Schürr, and B. Westfechtel. Gras, a graph oriented (software) engineering database system. *Information Systems*, 20(1):21–52, 1995.

[564] Norbert Kiesel, Andy Schürr, and Bernhard Westfechtel. GRAS, a graph-oriented (software) engineering database system. *Information Sciences*, 20(1):21–51, 1995.

[565] C. Kim and T.E. Jeong. HRNCE grammars - a hypergraph generating system with an eNCE way of rewriting. *Theoretical Computer Science*, 223(1–2):143–178, 1999.

[566] C. Kim and T.E. Jeong. Hrnce grammars: A hypergraph generating system with an ence way of rewriting. *Theoretical Computer Science*, 223(1/2), Jul 1999.

[567] Changwook Kim and Tae Eui Jeong. HRNCE grammars — A hypergraph generating system with an eNCE way of rewriting. Submitted for publication, 1995.

[568] Changwook Kim and Tae Eui Jeong. HRNCE Grammars—A Hypergraph Generating System with an eNCE Way of Rewriting. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 383–396. Springer-Verlag, 1996.

[569] Changwook Kim and Dong Hoon Lee. Node replacement graph languages squeezed with chains, trees, and forests. *Information and Computation*, 117:63–77, 1995.

[570] S. C. Kleene. Representation of events in nerve nets and finite automata. In C. Shannon and J. McCarthy, editors, *Automata Studies, Annals of Math. Studies 34*, pages 3–40. Princeton, New Jersey, 1956.

[571] P. Klein. Die Graphcodemaschine PROGRES. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1993.

[572] R. Klempien-Hinrichs. Net refinement by pullback rewriting. Technical report, LaBRI, University of Bordeaux, 1997.

[573] Renate Klempien-Hinrichs. Node replacement in hypergraphs: Simulation of hyperedge replacement, and decidability of confluence. In *Graph Grammars and Their Application to Computer Science*, Lecture Notes in Computer Science, 1996. To appear.

[574] Renate Klempien-Hinrichs. Node Replacement in Hypergraphs: Simulation of Hyperedge Replacement, and Decidability of Confluence. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 397–411. Springer-Verlag, 1996.

[575] Renate Klempien-Hinrichs. Net refinement by pullback rewriting. In M. Nivat, editor, *Proc. Foundations of Software Science and Computation Structures*, volume 1378 of *Lecture Notes in Computer Science*, pages 189–202. Springer, 1998.

[576] M. Koch. Bedingte verteilte Graphtransformation und ihre Anwendung auf verteilte Transaktionen. Technical Report 97-11, Technical University of Berlin, 1997.

[577] M. Koch, I. Fischer, and M. Berthold. Showing the equivalence of two training algorithms. In *Proceedings of the 1998 IEEE World Congress on Computational Intelligence*, volume 1, pages 447–456, Anchorage, Alaska, May 1998.

[578] C. Kohring. *Ausführung von Anforderungs-Dokumenten zum Rapid Prototyping*. PhD thesis, RWTH Aachen, 1995. In German.

[579] C. Kohring. *Ausführung von Anforderungsdefinitionen zum Rapid Prototyping*. Dissertation, Lehrstuhl für Informatik III, RWTH Aachen, 1996.

[580] A. Kolmogorov. About the notion of algorithm. *Uspekhi Mat. Nauk.*, 8(4/56):175–176, 1953.

[581] A. Kolmogorov and V. Uspenskii. On the definition of an algorithm. *American Mathematical Society Translations*, 29:216–245, 1963. Translated from Russian Original Uspekhi Mat. Nauk., 1958.

[582] Barbara König. *Description and Verification of Mobile Processes with Graph Rewriting Techniques*. PhD thesis, Technische Universität München, 1999.

[583] Barbara König. Generating type systems for process graphs. In *Proc. of CONCUR '99*, pages 352–367. Springer-Verlag, 1999. LNCS 1664.

[584] Barbara König. A general framework for types in graph rewriting. In *Proc. of FST TCS 2000*, pages 373–384. Springer-Verlag, 2000. LNCS 1974.

[585] Barbara König. A graph rewriting semantics for the polyadic pi-calculus. In *Workshop on Graph Transformation and Visual Modeling Techniques (Geneva, Switzerland), ICALP Workshops 2000*, pages 451–458. Carleton Scientific, 2000.

[586] Barbara König. Hypergraph construction and its application to the compositional modelling of concurrency. In *GRATRA 2000: Joint APPLIGRAPH/GETGRATS Workshop on Graph Transformation Systems*, 2000. Proceedings available as Report Nr. 2000-2 (Technische Universität Berlin).

[587] M. Korff. Algebraic transformation of equationally defined graph structures. Technical Report 92/32, Technische Universität Berlin, 1992.

[588] Martin Korff. Application of Graph Grammars to Rule-Based Systems. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 505–519. Springer-Verlag, 1991.

[589] Martin Korff and Leila Ribeiro. Formal Relationship between Graph Grammars and Petri Nets. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 288–303. Springer-Verlag, 1996.

[590] P. Kossisng. Modellierung abstrakter Syntaxgraphen für EBNF. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1992.

[591] C.-A. Krapp. *An adaptable Environment for the Management of Development Processes*. PhD thesis, Fakultät für Mathematik, Naturwissenschaften und Informatik, Rheinisch-Westfälische Technische Hochschule Aachen, 1998. Published by Augustinus-Verlag Aachen.

[592] H.-J. Kreowski. A comparison between Petri-nets and graph grammars. In H. Noltemeier, editor, *Graphtheoric Concepts in Computer Science, Proceedings of the International Workshop WG'80*, number 100 in Lecture Notes in Computer Science, pages 306–317. Springer-Verlag, 1981.

[593] H.-J. Kreowski and G. Rozenberg. On structured graph grammars (parts I, II). Technical Report 3/88, Universität Bremen, 1988.

[594] Hans-Jörg Kreowski. *Manipulationen von Graphmanipulationen.* PhD thesis, Technische Universität Berlin, 1977.

[595] Hans-Jörg Kreowski. Transformations of derivation sequences in graph grammars. In M. Karpiński, editor, *Fundamentals of Computation Theory*, volume 56 of *Lecture Notes in Computer Science*, pages 275–286, 1977.

[596] Hans-Jörg Kreowski. Anwendungen der Algebraischen Theorie von Graph-Grammatiken auf Konsistenz und Synchronisation in Datenbanksystemen. Technical Report 78-15, Berlin, 1978.

[597] Hans-Jörg Kreowski. A Pumping Lemma for Context-Free Graph Languages. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 270–283. Springer-Verlag, 1979.

[598] Hans-Jörg Kreowski. Graph grammar derivation processes. In *Graph-Theoretic Concepts in Computer Science*, pages 136–150, Linz, 1983. Trauner Verlag.

[599] Hans-Jörg Kreowski. Rule trees represent derivations in edge replacement systems. In G. Rozenberg and A. Salomaa, editors, *The Book of L*, pages 217–232. Springer-Verlag, Berlin, 1986.

[600] Hans-Jörg Kreowski. Is Parallelism Already Concurrency? Part 1: Derivations in Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 343–360. Springer-Verlag, 1987.

[601] Hans-Jörg Kreowski. Rule trees can help to escape hard graph problems. Technical report, Bremen, 1987.

[602] Hans-Jörg Kreowski. Parallel hyperedge replacement. In G. Rozenberg and A. Salomaa, editors, *Lindenmayer Systems*, pages 271–282. Springer-Verlag, Berlin, 1992.

[603] Hans-Jörg Kreowski. Five facets of hyperedge replacement beyond context-freeness. In Z. Ésik, editor, *Proc. Fundamentals of Computation Theory 93*, volume 710 of *Lecture Notes in Computer Science*, pages 69–86, 1993.

[604] Hans-Jörg Kreowski. Translations into the graph grammar machine. In Ronan Sleep, Rinus Plasmeijer, and Marko van Eekelen, editors, *Term Graph Rewriting: Theory and Practice*, chapter 13, pages 171–183. John Wiley, New York, 1993.

[605] Hans-Jörg Kreowski. An axiomatic approach to canonical derivations. In B. Pehrson and I. Simon, editors, *13th World Computer Congress 94, Volume 1*, pages 348–353. Elsevier Science (North-Holland), 1994.

[606] Hans-Jörg Kreowski. A case study in GRACE: Shortest paths. Technical report, Bremen, 1995.

[607] Hans-Jörg Kreowski. Graph grammars for software specification and programming: An eulogy in praise of GRACE. In G. Valiente and F. Rosselló, editors, *Proc. Colloquium on Graph Transformation and its Application in Computer Science*, pages 63–70, 1995.

[608] Hans-Jörg Kreowski and Sabine Kuske. On the Interleaving Semantics of Transformation Units—A Step into GRACE. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 89–106. Springer-Verlag, 1996.

[609] Hans-Jörg Kreowski, Sabine Kuske, and Andy Schürr. Nested graph transformation units. *International Journal of Software Engineering and Knowledge Engineering*, 7:479–502, 1997.

[610] Hans-Jörg Kreowski and G. Rozenberg. Finite string automata recognizing graph languages. Unpublished manuscript, 1980.

[611] Hans-Jörg Kreowski and Grzegorz Rozenberg. On the constructive description of graph languages accepted by finite automata. In J. Gruska and M. Chytil, editors, *Mathematical Foundations of Computer Science*, volume 118 of *Lecture Notes in Computer Science*, pages 398–409, 1981.

[612] Hans-Jörg Kreowski and Grzegorz Rozenberg. Note on node-rewriting graph grammars. *Information Processing Letters*, 18:21–24, 1984.

[613] Hans-Jörg Kreowski and Grzegorz Rozenberg. On structured graph grammars, parts I and II. *Information Sciences*, 52:185–210 and 221–246, 1990.

[614] Hans-Jörg Kreowski and Anne Wilharm. Net processes correspond to derivation processes in graph grammars. *Theoretical Computer Science*, 44:275–305, 1986.

[615] Hans-Jörg Kreowski and Anne Wilharm. Is Parallelism Already Concurrency? Part 2: Non Sequential Processes in Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 361–377. Springer-Verlag, 1987.

[616] H. Kreten. Graphenalgorithmen in PROGRES. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1995.

[617] Programmierung durch spezifikation und transformation: Bremer beiträge zum verbundprojekt korso (1). Technical Report 1/94, Universität Bremen, 1994.

[618] Programmierung durch spezifikation und transformation: Bremer beiträge zum verbundprojekt korso (2). Technical Report 10/94, Universität Bremen, 1994.

[619] J. B. Kruskal. Well-quasi-ordering, the tree-theorem, and Vazsonyi's conjecture. *Proceedings of the American Mathematical Society*, 1960.

[620] H. Kuchen, R. Loogen, J. Moreno-Navarro, and M. Rodrigez-Artalejo. Graph-based implementation of a functional logic language. In N. Jones, editor, *Proceedings of the 3rd Symposium on Programming*, volume 432 of *LNCS*, Berlin, 1990. Springer-Verlag.

[621] M. Kurt. Entwurf und implementierung einer kontroll-komponente für attributierte graph-ersetzung. Master's thesis, Fachbereich Informatik, Technische Universität Berlin, 2000.

[622] Sabine Kuske. Maximum path length pumping lemma for edge replacement languages. In Z. Ésik, editor, *Proc. Fundamentals of Computation Theory*, volume 710 of *Lecture Notes in Computer Science*, pages 342–351, 1993.

[623] Sabine Kuske. Implementing β-reduction by hypergraph rewriting. In A. Corradini and U. Montanari, editors, *Proc. Joint COMPUGRAPH/SEMAGRAPH Workshop on Graph Rewriting and Computation (SEGRAGRA '95)*, volume 2, pages 159–166. Elsevier Science, 1995.

[624] Sabine Kuske. Semantic aspects of the graph and rule centered language GRACE. In F. Rosselló Llompart and G. Valiente Feruglio, editors, *Proc. Colloquium on Graph Transformation and its Application in Computer Science*, Technical Report, Palma de Mallorca, pages 63–70, 1995.

[625] Klaus-Jörn Lange and Emo Welzl. String grammars with disconnecting or a basic root of the difficulty in graph grammar parsing. *Discrete Applied Mathematics*, 16:17–30, 1987.

[626] Clemens Lautemann. Decomposition trees: Structured graph representation and efficient algorithms. In M. Dauchet and M. Nivat, editors, *CAAP'88*, volume 299 of *Lecture Notes in Computer Science*, pages 28–39, 1988.

[627] Clemens Lautemann. Efficient algorithms on context-free graph languages. In T. Lepistö and A. Salomaa, editors, *Automata, Languages and Programming*, volume 317 of *Lecture Notes in Computer Science*, pages 362–378, 1988.

[628] Clemens Lautemann. The complexity of graph languages generated by hyperedge replacement. Report 4/89, Univ. Bremen, 1989.

[629] Clemens Lautemann. The complexity of graph languages generated by hyperedge replacement. *Acta Informatica*, 27:399–421, 1990.

[630] Clemens Lautemann. Tree automata, tree decomposition and hyperedge replacement. Informatik-Bericht 2/90, Univ. Mainz, 1990.

[631] Clemens Lautemann. Tree Automata, Tree Decomposition and Hyperedge Replacement. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 520–537. Springer-Verlag, 1991.

[632] M. Lefering. *Integrationswerkzeuge in einer Software-Entwicklungs-Umgebung*. PhD thesis, Fakultät für Mathematik, Naturwissenschaften und Informatik, Rheinisch-Westfälische Technische Hochschule Aachen, 1995. Published by Shaker-Verlag Aachen.

[633] T. Lengauer and E. Wanke. Decision problems on cellular graph grammars. volume 317 of *Lecture Notes in Computer Science*, pages 379–393. Springer, 1988.

[634] Thomas Lengauer. Efficient solution of biconnectivity problems on hierarchically defined graphs. In H. Noltemeier, editor, *Graph-Theoretic Concepts in Computer Science*, pages 201–215. Trauner Verlag, Linz, 1985.

[635] Thomas Lengauer. Hierarchical planarity testing algorithms. In L. Kott, editor, *Automata, Languages and Programming*, volume 226 of *Lecture Notes in Computer Science*, pages 215–225, 1986.

[636] Thomas Lengauer. Efficient algorithms for finding minimum spanning forests of hierarchically defined graphs. *Journal of Algorithms*, 8:260–284, 1987.

[637] Thomas Lengauer and K. W. Wagner. The correlation between the complexities of the non-hierarchical and hierarchical version of graph problems. In F. Brandenburg, G. Vidal-Naquet, and M. Wirsing, editors, *STACS 87*, volume 247 of *Lecture Notes in Computer Science*, pages 100–113, 1987.

[638] Thomas Lengauer and Egon Wanke. Efficient analysis of graph properties on context-free graph languages. In T. Lepistö and A. Salomaa, editors, *Proc. Intl. Coll. Automata, Languages and Programming (ICALP'88)*, volume 317 of *Lecture Notes in Computer Science*, pages 379–393. Springer, 1988.

[639] Thomas Lengauer and Egon Wanke. Efficient solution of connectivity problems on hierarchically defined graphs. *SIAM Journal on Computing*, 17:1063–1080, 1988.

[640] Thomas Lengauer and Egon Wanke. Efficient decision procedures for graph properties on context-free graph languages. *Journal of the Association for Computing Machinery*, 40:368–393, 1993.

[641] G. Levi and F. Luccio. A technique for graph embedding with constraints on node and arc correspondences. *Information Science*, 5(1):1–24, 1973.

[642] C. Lewerentz. *Interaktives Entwerfen großer Programmsysteme*. PhD thesis, RWTH Aachen, 1988. In German.

[643] C. Lewerentz and M. Nagl. A formal specification language for software systems defined by graph grammars. In Pape, editor, *Proc.of WG84 workshop on graphtheoretic concepts in comp. sci.*, pages 224–241, Linz, 1984. Trauner-Verlag.

[644] C. Lewerentz, M. Nagl, and B. Westfechtel. On integration mechanisms within a graphbased software development environment. In *Proc WG87 workshop on graphtheoretic concepts in comp. sci.*, volume 314 of *Lecture Notes in Computer Science*, pages 219–229. Springer-Verlag, 1988.

[645] Claus Lewerentz. *Interaktives Entwerfen großer Programmsysteme: Konzepte und Werkzeuge*, volume 194 of *Informatik-Fachberichte*. Springer-Verlag, Berlin, 1988. Doctoral dissertation.

[646] Ulrike Lichtblau. Decompilation of control structures by means of graph transformations. In H. Ehrig, C. Floyd, M. Nivat, and J. Thatcher, editors, *Mathematical Foundations of Software Development*, volume 185 of *Lecture Notes in Computer Science*, pages 284–297, 1985.

[647] Ulrike Lichtblau. *Flußgraphgrammatiken*. PhD thesis, Oldenburg, 1990.

[648] Ulrike Lichtblau. Recognizing Rooted Context-Free Flowgraph Languages in Polynomial Time. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 538–548. Springer-Verlag, 1991.

[649] A. Lindenmayer. L-systems in their biological context. In *Proceedings of the Conference on Biologically motivated Automata Theory*, pages 65–69, 1974. MITRE Corp. McLean Va.

[650] Aristid Lindenmayer. An Introduction to Parallel Map Generating Systems. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 27–40. Springer-Verlag, 1987.

[651] Aristid Lindenmayer and Karel Culik II. Growing cellular systems: Generation of graphs by parallel rewriting. *Int. J. General Systems*, 5:45–55, 1979.

[652] Aristid Lindenmayer and G. Rozenberg. Parallel generation of maps: Developmental systems of cell layers. In V. Claus, H. Ehrig, and G. Rozenberg, editors, *Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 301–316, 1979.

[653] Aristid Lindenmayer and Grzegorz Rozenberg. Parallel Generation of Maps: Developmental Systems for Cell Layers. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 301–316. Springer-Verlag, 1979.

[654] A. Lingas and Maciej M. Syslo. A polynomial-time algorithm for subgraph isomorphism of two-connected series-parallel graphs. In T. Lepistö and A. Salomaa, editors, *Automata, Languages and Programming*, volume 317 of *Lecture Notes in Computer Science*, pages 394–409, 1988.

[655] I. Litovsky and Y. Metivier. Computing trees with graph rewriting systems with priorities. In M. Nivat and A. Podelski, editors, *Tree Automata and Languages*, pages 115–139. Elsevier, 1992.

[656] Igor Litovsky and Yves Métivier. Computing with graph relabelling systems with priorities. In H. Ehrig, H.-J. Kreowski, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 549–563, 1991.

[657] Igor Litovsky and Yves Métivier. Computing with Graph Relabelling Systems with Priorities (Extended Abstract). In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 549–563. Springer-Verlag, 1991.

[658] Igor Litovsky and Yves Métivier. Computing trees with graph rewriting systems with priorities. In M. Nivat and A. Podelski, editors, *Tree Automata and Languages*, pages 115–139, 1992.

[659] Igor Litovsky and Yves Métivier. Computing with graph rewriting systems with priorities. *Theoretical Computer Science*, 115:191–224, 1993.

[660] Igor Litovsky, Yves Métivier, and Eric Sopena. Different local controls for graph relabeling systems. *Mathematical Systems Theory*, 28:41–65, 1995.

[661] Igor Litovsky, Yves Métivier, and W. Zielonka. The power and limitations of local computations on graphs and networks. In E. W. Mayr, editor, *Graph-Theoretic Concepts in Computer Science*, volume 657 of *Lecture Notes in Computer Science*, pages 333–345, 1993.

[662] M. Löwe. Algebraic approach to graph transformation, based on single pushout derivations. Technical Report 90/5, Technische Universität Berlin, 1990. Doctoral dissertation.

[663] M. Löwe. *Extended Algebraic Graph Transformation*. PhD thesis, TU Berlin, 1991.

[664] M. Löwe. Algebraic approach to single-pushout graph-transformation. *Theoretical Computer Science*, 109:181–224, 1993.

[665] M. Löwe and J. Müller. Algebraische graph-ersetzung: Mathematische modellierung und konfluenz. Technical Report 93-37, Technische Universität Berlin, 1993.

[666] Michael Löwe. *Extended Algebraic Graph Transformation*. PhD thesis, Berlin, 1990.

[667] Michael Löwe. Implementing algebraic specifications by graph transformation systems. *Journal of Information Processing and Cybernetics EIK*, 26(11/12):615–641, 1990.

[668] Michael Löwe. Algebraic approach to single-pushout graph transformation. *Theoretical Computer Science*, 109:181–224, 1993.

[669] Michael Löwe and Martin Beyer. AGG — an implementation of algebraic graph rewriting. In *Rewriting Techniques and Applications*, volume 690 of *Lecture Notes in Computer Science*, pages 451–456. Springer-Verlag, 1993.

[670] Michael Löwe and Hartmut Ehrig. Algebraic approach to graph transformation based on single pushout derivations. In R. H. Möhring, editor, *Graph-Theoretic Concepts in Computer Science*, volume 484 of *Lecture Notes in Computer Science*, pages 338–353, 1991.

[671] Michael Löwe, Martin Korff, and Annika Wagner. An algebraic framework for the transformation of attributed graphs. In Ronan Sleep, Rinus Plasmeijer, and Marko van Eekelen, editors, *Term Graph Rewriting: Theory and Practice*, pages 185–199. John Wiley, New York, 1993.

[672] Jacqueline Lück and Hermann B. Lück. Two-Dimensional, Differential, Intercalary Plant Tissue Growth and Parallel Graph Generating and Graph Recurrence Systems. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 284–300. Springer-Verlag, 1979.

[673] Jacqueline Lück and Hermann B. Lück. Generation of 3-Dimensional Plant Bodies By Double Wall Map and Stereomap Systems. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 219–231. Springer-Verlag, 1983.

[674] Jacqueline Lück and Hermann B. Lück. From OL and IL Map Systems to Indeterminate and Determinate Growth in Plant Morphogenesis. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 393–410. Springer-Verlag, 1987.

[675] Jacqueline Lück and Hermann B. Lück. From OL and IL map systems to intermediate and deterministic growth in plant morphogenesis. In H. Ehrig, M. Nagl, G. Rozenberg, and A. Rosenfeld, editors, *Graph Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 393–410, 1987.

[676] Jacqueline Lück and Hermann B. Lück. Double-Wall Cellwork Systems for Plant Meristems. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 564–581. Springer-Verlag, 1991.

[677] Jacqueline Lück and Hermann B. Lück. Cellworks with Cell Rewriting and Cell Packing for Plant Morphogenesis. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 536–549. Springer-Verlag, 1996.

[678] H. L. Ludwigs. Properties of ordered graph grammars. In H. Noltemeier, editor, *Graphtheoric Concepts in Computer Science, Proceedings of the International Workshop WG'80*, number 100 in Lecture Notes in Computer Science, pages 70–79. Springer-Verlag, 1980.

[679] O. Ly. On the logical hierarchy of graphs. Technical report, Colloqium New trends in Semantics, (satellite workshop of ICALP97), 1997.

[680] Saunders MacLane. A structural characterization of planar combinatorial graphs. *Duke Mathematical Journal*, 3:460–472, 1937.

[681] Saunders MacLane. *Categories for Working Mathematicians*. Springer-Verlag, New York, 1971.

[682] A. Maggiolo-Schettini and J. Winkowski. A kernel language for programmed rewriting of (hyper)graphs. *Acta Informatica*, 33(6):523–546, 1996.

[683] Andrea Maggiolo-Schettini and Adriano Peron. A Graph Rewriting Framework for Statecharts Semantics. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 107–121. Springer-Verlag, 1996.

[684] Andrea Maggiolo-Schettini and Józef Winkowski. Processes in Structures. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 317–330. Springer-Verlag, 1979.

[685] Andrea Maggiolo-Schettini and Józef Winkowski. Programmed Derivations of Relational Structures. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 582–598. Springer-Verlag, 1991.

[686] Andrea Maggiolo-Schettini and Józef Winkowski. A kernel language for programmed rewriting of (hyper)graphs. *Acta Informatica*, 33:523–546, 1996.

[687] Andrea Maggiolo-Schettini and Józef Winkowski. A partial-order representation of processes of transforming graphs. *Fundamenta Informaticae*, 31:337–355, 1997.

[688] Bernd Mahr and Anne Wilharm. Graph grammars as a tool for description in computer processed control: A case study. In H. J. Schneider and H. Göttler, editors, *Graph-Theoretic Concepts in Computer Science*, pages 165–176. Hanser Verlag, München/Wien, 1982.

[689] M. G. Main and Grzegorz Rozenberg. Handle NLC grammars and R.E. languages. *Journal of Computer and System Sciences*, 35:195–205, 1987.

[690] M. G. Main and Grzegorz Rozenberg. Edge-label controlled graph grammars. *Journal of Computer and System Sciences*, 40:188–228, 1990.

[691] Michael G. Main and Grzegorz Rozenberg. Fundamentals of Edge-Label Controlled Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 411–426. Springer-Verlag, 1987.

[692] H. Maurer. Simple matrix languages with leftmost restriction. *Information and Control*, 23(2):128–139, 1973.

[693] Hermann A. Maurer, Grzegorz Rozenberg, and Emo Welzl. Chain Code Picture Languages. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 232–244. Springer-Verlag, 1983.

[694] B. Mayoh. Another model for the development of multidimensional organisms. In A. Lindenmayer and G. Rozenberg, editors, *Automata, Languages, Development*, pages 469–486. North Holland, Amsterdam, 1976.

[695] E. Mayr, editor. *WG'92: 18th International Workshop on Graph Theoretic Concepts in Computer Science*, volume 657 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1992. Continuation of the WG *Fachtagung*.

[696] Carolyn L. McCreary, Richard O. Chapman, and F. S. Shieh. Using graph parsing for automatic graph drawing. *IEEE Transactions on Systems Man and Cybernetics (Part A: Systems and Humans)*, 28(5):545–561, sept 1998.

[697] J. McGregor. Relational consistency algorithms and their application in finding subgraph and graph isomorphisms. *Information Sciences*, 19:228–250, 1979.

[698] K. Mehlhorn. *Graph Algorithms and NP Completeness*. Springer-Verlag, 1984.

[699] A. Meier. *Semantisches Datenmodell für flächenbezogene Daten*. PhD thesis, Zürich, 1982.

[700] A. Meier. A Graph-Relational Approach to Geographic Databases. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 245–254. Springer-Verlag, 1983.

[701] A. Meier. A graph grammar approach to geographic databases. *Information Systems*, 10:9–19, 1985.

[702] Jan Messerschmidt. Graph Transductions in the Field of Automatic Translation of Natural Languages. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 255–266. Springer-Verlag, 1983.

[703] Y. Métivier and A. Muscholl. About the local detection of termination of local computations. In *The 4th International colloquium on structural information and communication complexity*. Carleton University Press, 1997.

[704] Y. Métivier and E. Sopena. Graph relabelling systems : a general overview. *Computers and artificial intelligence*, 16:167–185, 1997.

[705] J. Mezei and J. B. Wright. Algebraic automata and context-free sets. *Information and Control*, 11:3–29, 1967.

[706] M. Minas and L. Shklar. A high level visual language for generating web structures. In *VL'96 Proceedings of the IEEE Symposium on Visual Languages*, pages 284+. IEEE Computer Society Press, 1996.

[707] Yoshihiro Mizoguchi and Yasuo Kawahara. Relational graph rewrtings. *Theoretical Computer Science*, 11:311–328, 1995.

[708] R. Möhring, editor. *WG'90: 16th International Workshop on Graph Theoretic Concepts in Computer Science*, volume 484 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1990. Continuation of the WG *Fachtagung*.

[709] R. Möhring, editor. *WG'97: 23rd International Workshop on Graph Theoretic Concepts in Computer Science*, volume 1335 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1997. Continuation of the WG *Fachtagung*.

[710] D. Moldovan and Francesco Parisi-Presicce. Parallelism Analysis in Rule-Based Systems Using Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 427–439. Springer-Verlag, 1987.

[711] U. Montanari. Separable graphs, planar graphs and web grammars. *Information and Control*, 16(3):234–267, 1970.

[712] U. Montanari, A. Corradini, and F. Rossi. Graph processes. *Fundamenta Informaticae*, 26:241–265, 1996.

[713] U. Montanari and F. Rossi. Graph rewriting, constraint solving and tiles for coordinating distributed systems. Submitted for publication, 1997.

[714] Ugo Montanari. Separable graphs, planar graphs and web grammars. *Information and Control*, 16:243–267, 1970.

[715] Ugo Montanari and Francesca Rossi. An Efficient Algorithm for the Solution of Hierarchical Networks of Constraints. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 440–457. Springer-Verlag, 1987.

[716] Ugo Montanari and Francesca Rossi. A true concurrency semantics for concurrent constraint programming. In *ILPS91*. MIT Press, 1991.

[717] Ugo Montanari and Francesca Rossi. Graph rewriting for a partial ordering semantics of concurrent constraint programming. *Theoretical Computer Science*, 109:225–256, 1993.

[718] E. Moriya. Some remarks on state grammars and matrix grammars. *Information and Control*, 23(1):48–57, 1973.

[719] M. Mosbah. Probabilistic graph grammars. In E. W. Mayr, editor, *Graph-Theoric Concepts in Computer Science, 18th International Workshop, Wiesbaden-Naurod, Germany*, number 657 in Lecture Notes in Computer Science, pages 236–247. Springer-Verlag, 1992.

[720] M. Mosbah and N. Saheb. Non uniform random spanning trees on weighted graphs. Technical Report 1143–96, LaBRI, University of Bordeaux, 1996. Submitted to Theoret. Comput. Science.

[721] M. Mosbah and N. Saheb. Formal rational fractions and random walks on cycle graphs. In *Formal Power Series and Algebraic Combinatorics, 9th Conference*, Vienna, Austria, July 1997. Technical Report 1147–96, University of Bordeaux.

[722] M. Mosbah and N. Saheb. A syntactic approach to random walks on graphs. In *23rd International Workshop, WG'97*, Berlin, Germany, June 1997. Lect. Notes. Comput. Sci., to appear. Technical Report 1163–97, University of Bordeaux.

[723] Andrea Mößle and Heiko Vogler. Benefits of hypergraphs for program transformation. In K. Pohl M. Jarke, K. Pasedach, editor, *Proc. Informatik '97*, Reihe Informatik aktuell, pages 572–581. Springer Verlag, 1997.

[724] J. Mühlbacher, editor. *WG'77: 3. Fachtagung über Graphentheoretische Konzepte der Informatik*, volume 8 of *Berichte zur Praktischen Informatik*. Hanser-Verlag, München, 1977.

[725] J. Mühlbacher, editor. *WG'81: 7th Conference on Graph Theoretic Concepts in Computer Science*. Hanser-Verlag, München, 1981. Continuation of the WG *Fachtagung*.

[726] J. Müller. On termination of single-pushout graph rewriting. Technical Report 96-38, TU Berlin, 1996.

[727] J. Müller. A non-categorical characterisation of sequential independence for algebraic graph rewriting, and some applications. Technical Report 97-18, Technische Universität Berlin, 1997.

[728] J. Müller. Shifting derivations of non-injective rules in the algebraic graph rewriting approaches. Technical Report 97-16, Technische Universität Berlin, 1997.

[729] M. Münch. Constraints, pre- und post-conditions in progres. Master's thesis, Lehrstuhl für Informatik III, Rheinisch-Westfälische Technische Hochschule Aachen, 1996.

[730] M. Münch, A. Schürr, and A. Winter. Integrity constraints in the multi paradigm language progres. Technical Report TR-DSSE 98-2, University of Southampton, 1998.

[731] R. Munz. *Das Web-Modell*. PhD thesis, Stuttgart, 1976.

[732] Rudolf Munz. *Entwurf eines Mehr-Benutzer-Datenbanksystems mit graphenartigen Datenstrukturen und prozeduralen Datenbankfunktionen, school=Universitt Stuttgart*. PhD thesis, 1976.

[733] J. Mylopoulos. On the relation of graph grammars and graph automata. In *Proceedings of the 13th Symposium on Switching and Automata Theory*, pages 108–120, 1972.

[734] M. Nagl. Formale sprachen von markierten graphen. Technical Report 4, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1974.

[735] M. Nagl. Set theoretic approaches to graph grammars. Technical Report 87-8, Fachgruppe Informatik, RWTH Aachen, 1987.

[736] M. Nagl, editor. *WG'89: 15th International Workshop on Graph Theoretic Concepts in Computer Science*, volume 411 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1989. Continuation of the WG *Fachtagung*.

[737] M. Nagl, editor. *Proc. WG89 15th int. Workshop on graphtheoretic concepts in comp. sci.*, number 411 in Lecture Notes in Computer Science. Springer-Verlag, 1990.

[738] M. Nagl. *Softwaretechnik: Methodisches Programmieren im Großen*. Springer-Verlag, 1990. (in German).

[739] M. Nagl, editor. *WG'95: 21st International Workshop on Graph Theoretic Concepts in Computer Science*, volume 1017 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1995. Continuation of the WG *Fachtagung*.

[740] M. Nagl, editor. *The IPSEN Project*. Lecture Notes in Computer Science. Springer-Verlag, 1996. to appear.

[741] M. Nagl and J. Perl, editors. *Proc. WG83 intl. workshop on graphtheoretic concepts in c.sc.*, Linz, 1983. Trauner-Verlag.

[742] M. Nagl and J. Perl, editors. *WG'83: International Workshop on Graph Theoretic Concepts in Computer Science*. Trauner-Verlag, Linz, 1983. Continuation of the WG *Fachtagung*.

[743] M. Nagl, A. Schürr, and M. Münch, editors. *AGTIVE'99 International Workshop on Applications of Graph Transformation with Industrial Relevance*, volume 1779 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 2000. Fresh! Contains about 30 Original Papers.

[744] M. Nagl and B. Westfechtel, editors. *Integration von Entwicklungssystemen in Ingenieuranwendungen: Substantielle Verbesserung der Entwicklungsprozesse*. Springer-Verlag, Heidelberg, 1998.

[745] Manfred Nagl. Beziehungen zwischen verschiedenen Klassen von Diagramm-Sprachen. Arbeitsbericht 6, 3, 72-93, Institut für Mathematische Maschinen und Datenverarbeitung, Erlangen, 1973.

[746] Manfred Nagl. Eine Präzisierung des Pfaltz/Rosenfeldschen Produktionsbegriffs bei mehrdimensionalen Grammatiken. Arbeitsbericht 6a, 3, 56-71, Institut für Mathematische Maschinen und Datenverarbeitung, Erlangen, 1973.

[747] Manfred Nagl. *Formale Sprachen von markierten Graphen*. PhD thesis, Erlangen, 1974.

[748] Manfred Nagl. Formal languages of labelled graphs. *Computing*, 16:113–137, 1976.

[749] Manfred Nagl. A Tutorial and Bibliographical Survey on Graph Grammars. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 70–126. Springer-Verlag, 1979.

[750] Manfred Nagl. *Graph-Grammatiken: Theorie, Anwendungen, Implementierungen.* Vieweg, Braunschweig, 1979.

[751] Manfred Nagl. Bibliography on Graph Rewriting Systems (Graph-Grammars). In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 415–448. Springer-Verlag, 1983.

[752] Manfred Nagl. A Software Development Environment Based on Graph Technology. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 458–478. Springer-Verlag, 1987.

[753] Manfred Nagl. Set Theoretic Approaches to Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 41–54. Springer-Verlag, 1987.

[754] Manfred Nagl, Gregor Engels, Rupert Gall, and Wilhelm Schäfer. Software Specification by Graph Grammars. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 267–287. Springer-Verlag, 1983.

[755] Manfred Nagl and Andy Schürr. A Specification Environment for Graph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 599–609. Springer-Verlag, 1991.

[756] Manfred Nagl and Andy Schürr. Software Integration Problems and Coupling of Graph Grammar Specifications. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 155–169. Springer-Verlag, 1996.

[757] A. Nakamura and K. Aizawa. On a relationship between graph l-systems and picture languages. *Theoretical Computer Science*, 24:161–177, 1983.

[758] Akira Nakamura, Aristid Lindenmayer, and Kunio Aizawa. Map OL Systems with Markers. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 479–495. Springer-Verlag, 1987.

[759] F. Newbery-Paulisch. *The Design of an Extendible Graph Editor.* PhD thesis, Universität Karlsruhe, 1991.

[760] H. Noltemeier, editor. *WG'76: 2. Fachtagung über Graphentheoretische Konzepte der Informatik*, volume 4 of *Berichte zur Praktischen Informatik.* Hanser-Verlag, München, 1976.

[761] H. Noltemeyer, editor. *WG'80: International Workshop on Graph Theoretic Concepts in Computer Science*, volume 100 of *Lecture Notes in Computer Science.* Springer-Verlag, Berlin, 1980. Continuation of the WG *Fachtagung.*

[762] H. Noltemeyer, editor. *WG'85: International Workshop on Graph Theoretic Concepts in Computer Science.* Trauner-Verlag, Linz, 1985. Continuation of the WG *Fachtagung.*

[763] Kristian Nyrup and Brian H. Mayoh. Map Grammars: Cycles and the Algebraic Approach. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 331–340. Springer-Verlag, 1979.

[764] Alexander Ollongren. On Multilevel-Graph Grammars. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 341–349. Springer-Verlag, 1979.

[765] Peter Padawitz. Graph Grammars and Operational Semantics. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 350–366. Springer-Verlag, 1979.

[766] Peter Padawitz. Graph grammars and operational semantics. *Theoretical Computer Science*, 19:117–141, 1982.

[767] J. Padberg. Survey of high level replacement systems. Technical Report 93-8, Technische Universität Berlin, 1993.

[768] J. Padberg. *Abstract Petri Nets: Uniform Approach and Rule based Refinement*. PhD thesis, Fachbereich Informatik, Technische Universität Berlin, 1996. Published by Shaker-Verlag Aachen.

[769] J. Padberg, H. Ehrig, and M. Gajewsky. Action nets and abstract statecharts in the theory of high level replacement systems. Technical Report 97-14, Technische Universität Berlin, 1997.

[770] J. Padberg and C. Ermel. Formalisation of variables in algebraic high level nets: Comparison of different approaches. Technical Report 97-19, Technische Universität Berlin, 1997.

[771] U. Pape, editor. *WG'75: 1. Fachtagung über Graphentheoretische Konzepte der Informatik*, volume 1 of *Berichte zur Praktischen Informatik*. Hanser-Verlag, München, 1975.

[772] U. Pape, editor. *WG'79: 5th Conference on Graph Theoretic Concepts in Computer Science*. Hanser-Verlag, München, 1979. Continuation of the WG *Fachtagung*.

[773] U. Pape, editor. *WG'84: International Workshop on Graph Theoretic Concepts in Computer Science*. Trauner-Verlag, Linz, 1984. Continuation of the WG *Fachtagung*.

[774] Rohit J. Parikh. Language generating devices. Quarterly Progress Report 60, Research Laboratory of Electronics, M.I.T., 1961.

[775] Rohit J. Parikh. On context-free languages. *Journal of the Association for Computing Machinery*, 13:570–581, 1966.

[776] F. Parisi-Presicce. Single vs. double pushout derivations of graphs. In E. W. Mayr, editor, *Graph-theoric concepts in computer science : proceedings 18th international workshop, WG'92*, number 657 in LNCS, pages 248–262. Springer Verlag, 1992.

[777] Francesco Parisi-Presicce. Modular system design applying graph grammar techniques. In G. Ausiello, M. Dezani-Ciancaglini, and S. Ronchi Della Rocca, editors, *Automata, Languages and Programming*, volume 372 of *Lecture Notes in Computer Science*, pages 621–636, 1989.

[778] Francesco Parisi-Presicce. A rule based approach to modular system design. In *12th Int. Conf. Software Engineering*, pages 202–211, 1990.

[779] Francesco Parisi-Presicce. Transformations of Graph Grammars. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 428–442. Springer-Verlag, 1996.

[780] Francesco Parisi-Presicce, Hartmut Ehrig, and Ugo Montanari. Graph Rewriting with Unification and Composition. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 496–514. Springer-Verlag, 1987.

[781] Francesco Parisi-Presicce and Gabriele Piersanti. Multilevel graph grammars. In W. Mayr, Ernst, Gunter Schmidt, and Gottfried Tinhofer, editors, *Graph-Theoretic Concepts in Computer Science*, volume 903 of *Lecture Notes in Computer Science*, pages 51–64, 1995.

[782] Francis Newbery Paulisch. *The Design of an Extendible Graph Editor.* Number 704 in Lecture Notes in Computer Science. Springer-Verlag, Berlin, 1993.

[783] T. Pavlidis and M. Yannakakis. Topological characterization of families of graphs generated by certain types of graph grammars. *Information and Control*, 42(1):72–86, 1979.

[784] Theodosios Pavlidis. Linear and context-free graph grammars. *Journal of the ACM*, 19(1):11–23, 1972.

[785] Theodosios Pavlidis. Representation of figures by labeled graphs. *Pattern Recognition*, 4:5–17, 1972.

[786] Theodosios Pavlidis. Structural descriptions and graph grammars. In S. K. Chang and K. S. Fu, editors, *Pictorial Inf. Syst.*, volume 80 of *Lecture Notes in Computer Science*, pages 86–103, 1980.

[787] Azaria Paz. Geometry versus Topology in Map Grammars. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 288–296. Springer-Verlag, 1983.

[788] Azaria Paz. The Theory of Graphoids: A Survey. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 610–621. Springer-Verlag, 1991.

[789] Azaria Paz and Y. Raz. Complexity of Pattern Generation by MAP-L Systems. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 367–378. Springer-Verlag, 1979.

[790] L. Pelecq. Isomorphismes et automorphismes des graphes contextfr-free, équationnels et automatiques. *Thèse de doctorat,université Bordeaux 1*, pages 1–127, 1997.

[791] S. V. Petrov. Graph grammars and automata (survey). *Automation and Remote Control*, 39:1034–1050, 1978.

[792] J. Pfaltz. Graph structures. *Journal of the ACM*, 19:411–422, 1972.

[793] J. L. Pfaltz. Transformation structures by convex homomorphisms. In H. Ehrig, M. Nagl, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science, 2nd International Workshop, Haus Ohrbeck, Germany*, number 153 in Lecture Notes in Computer Sciences, pages 297–313. Spinger-Verlag, 1983.

[794] John L. Pfaltz. Web grammars and picture description. *Computer Graphics and Image Processing*, 1:193–220, 1972.

[795] John L. Pfaltz. A Graph Grammar that describes the Set of Two-Dimensional Surface Networks. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 379–388. Springer-Verlag, 1979.

[796] John L. Pfaltz. Transformation of Structures by Convex Homomorphisms. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 297–313. Springer-Verlag, 1983.

[797] John L. Pfaltz and Azriel Rosenfeld. Web grammars. In *Int. Joint Confenence on Artificial Intelligence*, pages 609–619, 1969.

[798] W. Pickartz. Generierungsmechanismen für graphische Editoren. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1995.

[799] Rinus Plasmeijer and Marko van Eekelen, editors. *Functional Programming and Parallel Graph Rewriting.* Addison-Wesley, Wokingham, England, 1993.

[800] D. Plump. Termination of graph rewriting is undecidable. Technical Report 7/97, Universität Bremen, 1997.

[801] Detlef Plump. Graph-Reducible Term Rewriting Systems. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 622–636. Springer-Verlag, 1991.

[802] Detlef Plump. Implementing term rewriting by graph reduction: Termination of combined systems. In S. Kaplan and M. Okada, editors, *Conditional and Typed Rewriting Systems*, volume 516 of *Lecture Notes in Computer Science*, pages 307–317, 1991.

[803] Detlef Plump. Collapsed tree rewriting: Completeness, confluence, and modularity. In M. Rusinowitch and J. L. Rémy, editors, *Proc. Conditional Term Rewriting Systems*, volume 656 of *Lecture Notes in Computer Science*, pages 97–112, 1993.

[804] Detlef Plump. *Evaluation of Functional Expressions by Hypergraph Rewriting.* PhD thesis, Bremen, 1993.

[805] Detlef Plump. Hypergraph rewriting: Critical pairs and undecidability of confluence. In Ronan Sleep, Rinus Plasmeijer, and Marko van Eekelen, editors, *Term Graph Rewriting: Theory and Practice*, chapter 15. John Wiley, New York, 1993.

[806] Detlef Plump. Critical pairs in term graph rewriting. In Igor Prívara, Branislav Rovan, and Peter Ružička, editors, *Mathematical Foundations of Computer Science 1994*, volume 841 of *Lecture Notes in Computer Science*, pages 556–566, 1994.

[807] Detlef Plump. On termination of graph rewriting. In Manfred Nagl, editor, *Graph-Theoretic Concepts in Computer Science*, volume 1017 of *Lecture Notes in Computer Science*, pages 88–100, 1995.

[808] Detlef Plump. Simplification orders for term graph rewriting. In I. Prívara and P. Ružička, editors, *Proc. Mathematical Foundations of Computer Science 1997*, volume 1295 of *Lecture Notes in Computer Science*, pages 458–467, 1997.

[809] Detlef Plump. Termination of graph rewriting is undecidable. Informatik-Bericht 7/97, Universität Bremen, Fachbereich Mathematik und Informatik, 1997.

[810] Detlef Plump and Annegret Habel. Graph unification and matching. In *Graph Grammars and Their Application to Computer Science*, Lecture Notes in Computer Science, 1996. To appear.

[811] Detlef Plump and Annegret Habel. Graph Unification and Matching. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 75–88. Springer-Verlag, 1996.

[812] A. Poensgen. Generierung eigenständiger Anwendungen aus PROGRES. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1995.

[813] Terrence W. Pratt. Pair grammars, graph languages and string-to-graph translations. *Journal of Computer and System Sciences*, 5:560–595, 1971.

[814] Terrence W. Pratt. Definition of Programming Language Semantics using Grammars for Hierarchical Graphs. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 389–400. Springer-Verlag, 1979.

[815] Terrence W. Pratt. Formal Specification of Software using H-Graph Semantics. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 314–332. Springer-Verlag, 1983.

[816] P. Prusinkiewicz and A. Lindenmayer. *The Algorithmic Beauty of Plants.* Springer-Verlag, New York, 1990.

[817] Przemyslaw Prusinkiewicz. Applications of L-Systems to Computer Imagery. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 534–548. Springer-Verlag, 1987.

[818] Przemyslaw Prusinkiewicz and Lila Kari. Subapical Bracketed L-Systems. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 550–564. Springer-Verlag, 1996.

[819] M. O. Rabin. A simple method of undecidability proofs and some applications. In *Log. Meth. Phil. Sci. Proc.*, pages 58–68, Jerusalem, 1964.

[820] M. O. Rabin. Decidability of second-order theories and automata on infitite trees. *Trans. of Amer. Math. Soc.*, 141:1–35, 1969.

[821] V. Rajlich. Dynamics of discrete systems and pattern reproduction. *Journal of Computer and System Sciences*, 11:186–202, 1975.

[822] Václav Rajlich. Determinism in Relational Systems. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 401–408. Springer-Verlag, 1979.

[823] M. R. K. Krishna Rao. Graph reducibility of term rewriting systems. In *Mathematical Foundations of Computer Science*, Lecture Notes in Computer Science, 1995. To appear.

[824] Jean-Claude Raoult. On graph rewritings. *Theoretical Computer Science*, 32:1–24, 1984.

[825] Jean-Claude Raoult and Frédéric Voisin. Set-theoretic graph rewriting. In Hans Jürgen Schneider and Hartmut Ehrig, editors, *Graph Transformations in Computer Science*, volume 776 of *Lecture Notes in Computer Science*, pages 312–325, 1994.

[826] V. Rayward-Smith. Hypergrammars, an extension of macro grammars. *Journal of Computer and System Sciences*, 14(1):130–149, 1977.

[827] J. Rekers and A. Schürr. Defining and parsing visual languages with layered graph grammars. Private Pre-Print of their Publication in the Journal of Visual Languages and Computing.

[828] J. Rekers and A. Schürr. A parsing algorithm for context sensitive graph grammars. Technical Report 95-05, Vakgroep Informatica, Rijks-Universiteit te Leiden, Jan 1995.

[829] J. Rekers and A. Schürr. A parsing algorithm for context sensitive graph grammars. Technical Report 95-05, Rijksuniversiteit te Leiden, 1995.

[830] J. Rekers and A. Schürr. Defining and parsing visual languages with layered graph grammars. *Journal of Visual Languages and Computing*, 7(3), 1996/97.

[831] A. Rensink. Model-checking graph grammars. In M. Leuschel, S. Gruner, and S. Lo-Presti, editors, *AVOCS'03 Proceedings of the 3rd Workshop on Automated Verification of Critical Systems*, Southampton (GB), April 2003.

[832] T. Reps. *Generating Language-based Environments*. PhD thesis, 1984.

[833] N. Robertson and P. D. Seymour. Graph minors XVI, wagner's conjecture. To appear.

[834] N. Robertson and P. D. Seymour. Graph minors I, excluding a forest. *Journ. Combinatorial Theory Ser. B*, 35:39–61, 1983.

[835] N. Robertson and P. D. Seymour. Graph minors II, algorithmic aspects of tree width. *Journal of Algorithms*, 7:309–322, 1986.

[836] N. Robertson and P. D. Seymour. Graph minors V, excluding a planar graph. *Journ. Combinatorial Theory Ser. B*, 41:92–114, 1986.

[837] N. Robertson and P. D. Seymour. Graph minors XIII. The disjoint paths problem. To appear, 1990.

[838] Donald J. Rose. Triangulated graphs and the elimination process. *Journal of Mathematical Analysis and Applications*, 33:597–609, 1970.

[839] Donald J. Rose. On simple characterizations of k-trees. *Discrete Mathematics*, 7:317–322, 1974.

[840] Barry K. Rosen. Tree-manipulating systems and Church-Rosser theorems. *Journal of the ACM*, 20:160–187, 1973.

[841] Barry K. Rosen. A Church-Rosser theorem for graph grammars. *Sigact News*, 7(3):26–31, 1975.

[842] Barry K. Rosen. Deriving graphs from graphs by applying a production. *Acta Informatica*, 4:337–357, 1975.

[843] Manfred Rosendahl and Karl Peter Mankwald. Analysis of Programs by Reduction of their Structure. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 409–417. Springer-Verlag, 1979.

[844] A. Rosenfeld. Connectivity in digital pictures. *Journal of the ACM*, 17:146–160, 1970.

[845] A. Rosenfeld. Isotonic grammars, parallel grammars and picture grammars. Technical Report 70-111, Computing Science Centre, University of Maryland, 1970.

[846] A. Rosenfeld. A note on cycle grammars. *Information and Control*, 27(4):374–377, 1975.

[847] A. Rosenfeld and J. Pfaltz. Sequential operations in digital picture processing. *Journal of the ACM*, 13:471–494, 1966.

[848] Azriel Rosenfeld. Isotonic grammars, parallel grammars, and picture grammars. *Machine Intelligence*, 6:281–294, 1971.

[849] Azriel Rosenfeld. Array and web languages: An overwiew. In A. Lindenmayer and G. Rozenberg, editors, *Automata, Languages, Development*, pages 517–529. North Holland, Amsterdam, 1976.

[850] Azriel Rosenfeld. Array Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 67–70. Springer-Verlag, 1987.

[851] Azriel Rosenfeld. A Note on Graph Decimation. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 637–640. Springer-Verlag, 1991.

[852] Azriel Rosenfeld and D. Milgram. Web automata and web grammars. *Machine Intelligence*, 7:307–324, 1972.

[853] Azriel Rosenfeld and Angela Wu. Cellular Computers for Parallel Region-Level Image Processing. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 333–348. Springer-Verlag, 1983.

[854] D. Rosenkrantz. Programmed grammars and classes of formal languages. *Journal of the ACM*, 16:107–131, 1969.

[855] G. Rozenberg. Direction-controlled programmed grammars. *Acta Informatica*, 1:242–252, 1972.

[856] G. Rozenberg. Introduction to l-systems. In *Proceedings of the Conference on Biologically motivated Automata Theory*, pages 29–37, 1974. MITRE Corp. McLean Va.

[857] G. Rozenberg. Context free grammars with graph controlled tables. *Journal of Computer and System Sciences*, 13(1):90–99, 1976.

[858] G. Rozenberg. Selective substitution grammars: Towards a framework for rewriting systems. *Elektronische Informations-Verarbeitung und Kybernetik*, 13(9):455–463, 1977.

[859] G. Rozenberg, editor. *Handbook on Graph Grammars and Computing by Graph Transformation 1 (Foundations)*. World Scientific, Singapore, 1997.

[860] G. Rozenberg and A. Ehrenfeucht. Nonterminals versus homomorphisms in defining languages for some classes of rewriting systems. *Acta Informatica*, 3:265–283, 1974.

[861] G. Rozenberg, H. Ehrig, and V. Claus, editors. *International Workshop on Graph Grammars and their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1979. Contains an extended Bibliography of Graph Grammar Literature, compiled by M. Nagl.

[862] G. Rozenberg, H. Ehrig, G. Engels, and J. Cuny, editors. *5th International Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1995.

[863] G. Rozenberg, H. Ehrig, et al., editors. *Handbook on Graph Grammars and Computing by Graph Transformation 2 (Specifications and Programming)*. World Scientific, Singapore, 1999. With CD-ROM including a lot of Graph Transformation Software.

[864] G. Rozenberg, H. Ehrig, et al., editors. *Handbook on Graph Grammars and Computing by Graph Transformation 3 (Concurrency)*. World Scientific, Singapore, 1999.

[865] G. Rozenberg, H. Ehrig, and M. Nagl, editors. *2nd International Workshop on Graph Grammars and their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1983.

[866] G. Rozenberg, H. Ehrig, M. Nagl, and A. Rosenfeld, editors. *3rd International Workshop on Graph Grammars and their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1987.

[867] G. Rozenberg, H. Ehrig, M. Nagl, and A. Rosenfeld, editors. *4th International Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1991.

[868] G. Rozenberg, D. Janssens, H. Genrich, and P. Thiagarajan. Generalized handle grammars and their relation to petri nets. *Elektronische Informations-Verarbeitung und Kybernetik*, 20(4):179–206, 1984.

[869] G. Rozenberg, H. Kleijn, and R. Verraedt. On the role of blocking in rewriting systems. *Acta Cybernetica*, 5:398–408, 1980.

[870] G. Rozenberg and A. Lindenmayer. Developmental systems with locally catenative formulas. *Acta Informatica*, 2:214–248, 1973.

[871] Grzegorz Rozenberg. An Introduction to the NLC Way of Rewriting Graphs. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 55–66. Springer-Verlag, 1987.

[872] Grzegorz Rozenberg, editor. *Special issue on graph transformation systems*, volume XXVII of *Fundamanta Informaticae*. IOS Press, 1996.

[873] Grzegorz Rozenberg, editor. *Handbook of Graph Grammars and Computing by Graph Transformation. Vol. I: Foundations*. World Scientific, 1997.

[874] Grzegorz Rozenberg and Arto Salomaa, editors. *The Book of L*, Berlin, 1986. Springer-Verlag.

[875] Grzegorz Rozenberg and Emo Welzl. Boundary NLC graph grammars—basic definitions, normal forms, and complexity. *Information and Control*, 69:136–167, 1986.

[876] Grzegorz Rozenberg and Emo Welzl. Graph theoretic closure properties of the family of boundary NLC graph languages. *Acta Informatica*, 23:289–309, 1986.

[877] Grzegorz Rozenberg and Emo Welzl. Combinatorial properties of boundary NLC graph languages. *Discrete Applied Mathematics*, 16:59–73, 1987.

[878] M. Rudolf. Utilizing constraint satisfaction techniques for efficient graph pattern matching. In H. Ehrig, G. Engels, H.-J. Kreowski, and G. Rozenberg, editors, *6th International Workshop on Theory and Application of Graph Transformations*, volume 1764 of *LNCS*, Berlin, 2000. Springer-Verlag.

[879] A. Salomaa. Matrix grammars with a leftmost restriction. *Information and Control*, 20(2):143–149, 1972.

[880] A. Salomaa. *Formal Languages*. Academic Press, New York, 1973.

[881] K. Salomon. String and graph grammar characterizations of bounded regular languages. *International Journal of Computer and Information Sciences*, 7(1):1–10, 1978.

[882] A. Sanfeliu and K. S. Fu. Tree-Graph Grammars for Pattern Recognition. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 349–368. Springer-Verlag, 1983.

[883] Walter J. Savitch. Graphs of Processors. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 418–425. Springer-Verlag, 1979.

[884] J. Saxe. Dynamic programming algorithms for recognizing small-bandwidth graphs in polynomial time. *SIAM Journ. Algebraic Discrete Methods*, 1:363–369, 1980.

[885] G. Schied. Über Graphgrammatiken: eine Spezifikationsmethode für Programmiersprachen und verteilte Regelsysteme. Technical Report 25-2, IMMD, Universität Erlangen, 1992. Doctoral dissertation.

[886] H. Schmeck. Algebraic characterization of reducible flowcharts. *Journal of Computer and System Sciences*, 27:165–199, 1983.

[887] H. Schmeck. Flow graph grammars and flow graph languages. In M. Nagl and J. Perl, editors, *Graph-Theoretic Concepts in Computer Science*, pages 319–329. Trauner Verlag, Linz, 1983.

[888] G. Schmidt and R. Berghammer, editors. *Proc. Int. workshop on graphtheoretic concepts in computer science*, volume 570 of *Lecture Notes in Computer Science*. Springer-Verlag, 1991.

[889] G. Schmidt and R. Berghammer, editors. *WG'91: 17th International Workshop on Graph Theoretic Concepts in Computer Science*, volume 570 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1991. Continuation of the WG *Fachtagung*.

[890] H.-J. Schneider. Chomsky-systeme für partielle ordnungen. Technical Report 3, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1970.

[891] H.-J. Schneider. On outward and inward productions in the categorical graph grammar approach and delta grammars. *Mathematical Structures in Computer Science*, 6:527–543, 1996.

[892] H.-J. Schneider and H. Ehrig, editors. *International Workshop on Graph Transformations in Computer Science*, volume 776 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1993.

[893] H.-J. Schneider and H. Göttler, editors. *WG'82: 8th Conference on Graph Theoretic Concepts in Computer Science*. Hanser-Verlag, München, 1982. Continuation of the WG *Fachtagung*.

[894] H.-J. Schneider and H. Göttler, editors. *WG'87: International Workshop on Graph Theoretic Concepts in Computer Science*, volume 314 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1987. Continuation of the WG *Fachtagung*.

[895] H.-J. Schneider and M. Nagl, editors. *WG'78: 4. Fachtagung über Graphentheoretische Konzepte der Informatik*, volume 13 of *Berichte zur Praktischen Informatik*. Hanser-Verlag, München, 1978.

[896] Hans Jürgen Schneider. Chomsky-Systeme für partielle Ordnungen. Arbeitsbericht 3,3, Institut für Mathematische Maschinen und Datenverarbeitung, Erlangen, 1970.

[897] Hans Jürgen Schneider. Formal systems for structure manipulations. Technical Report 3/1/71, Berlin, 1971.

[898] Hans Jürgen Schneider. Syntax-directed description of incremental compilers. In D. Siefkes, editor, *GI — 4. Jahrestagung*, volume 26 of *Lecture Notes in Computer Science*, pages 192–201, 1975.

[899] Hans Jürgen Schneider. Graph grammars. In M. Karpiński, editor, *Fundamentals of Computation Theory*, volume 56 of *Lecture Notes in Computer Science*, pages 314–331, 1977.

[900] Hans Jürgen Schneider. Describing distributed systems by categorical graph grammars. In M. Nagl, editor, *Graph-Theoretic Concepts in Computer Science*, volume 411 of *Lecture Notes in Computer Science*, pages 121–135, 1990.

[901] Hans Jürgen Schneider. On categorical graph grammars: Integrating structural transformations and operations on labels. *Theoretical Computer Science*, 109:257–274, 1993.

[902] Hans Jürgen Schneider and Hartmut Ehrig. Grammars on partial graphs. *Acta Informatica*, 6:297–316, 1976.

[903] Hans Jürgen Schneider and Hartmut Ehrig, editors. *Graph Transformations in Computer Science*, volume 776 of *Lecture Notes in Computer Science*, 1994.

[904] M. Schnitzler. Graph grammars and the complexity gap in the isomorphism problem for acyclic digraphs. In H.. Noltemeier, editor, *Graphtheoric Concepts in Computer Science, Proceedings of the International Workshop WG'80*, number 100 in Lecture Notes in Computer Science, pages 137–149. Springer-Verlag, 1980.

[905] Manfred Schnitzler. The Isomorphism Problem is Polynomially Solvable for Certain Graph Languages. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 369–379. Springer-Verlag, 1983.

[906] A. Schürr. *A Guided Tour through the PROGRES Environnement*. RWTH Aachen, D-52056 Aachen, Germany.

[907] A. Schürr. *PROGRES for Beginners*. RWTH Aachen, D-52056 Aachen, Germany.

[908] A. Schürr. *Operational Specifications with Programmed Graph Rewriting Systems*. PhD thesis, RWTH Aachen, D-52056 Aachen, Germany, 1991.

[909] A. Schürr. *Operationales Spezifizieren mit programmierten Graphersetzungssystemen: formale Definitionen, Anwendungen und Werkzeuge*. Deutscher Universitätsverlag, 1991. Dissertation, RWTH Aachen.

[910] A. Schürr. A fixpoint semantics for programmed graph transformations. *Tech. report B-14*, 1994.

[911] A. Schürr. Logic based programmed structure rewriting systems. Technical Report 94-13, Fachgruppe Informatik, RWTH Aachen, 1994.

[912] A. Schürr. PROGRES, a visual language and environment for programming with graph rewrite systems. Technical Report AIB 94-11, RWTH Aachen, 1994.

[913] A. Schürr. Rapid programming with graph rewrite rules. In *USENIX Symposium on Very High Level Languages*, pages 83–100. USENIX Association, 1994.

[914] A. Schürr. Specification of graph translators with triple graph grammars. In G. Tinhofer, editor, *Proc. WG94 int.workshop on graph theoretic concepts in comp. sci.*, volume 903 of *Lecture Notes in Computer Science*, pages 151–163, Herrsching, 1994. Springer-Verlag.

[915] A. Schürr. Logic based programmed structure rewriting systems. *Fundamentae Informaticae, Special Issue on Graph Transformation Systems*, 1995. to appear.

[916] A. Schürr. *The PROGRES Language Manual Version 9.X.* Lehrstuhl Informatik III, RWTH Aachen, 1998. Version 10.X is already existing but I don't know when the manual will be released.

[917] A. Schürr and D. Blostein. Computing with graphs and graph rewriting. Technical Report 97-8, Fachgruppe Informatik, RWTH Aachen, 1997.

[918] A. Schürr, P. Bottoni, and G. Taentzer. Efficient parsing of visual languages based on critical pair analysis and contextual layered graph transformation. Submitted to the VL'2000 Conference, 2000.

[919] A. Schürr and A. Winter. Modules and updatable graph views for programmed graph rewriting systems. Technical Report 97-3, Fachgruppe Informatik, RWTH Aachen, 1997.

[920] A. Schürr, A. Winter, and A. Zündorf. Graph grammar engineering with progres. In Botella and Schäfer, editors, *ESEC'95 Proceedings of the 5th European Software Engineering Conference*, volume 989 of *Lecture Notes in Computer Science*, pages 219–234, Berlin, 1995. Springer-Verlag.

[921] A. Schürr, A. Winter, and A. Zündorf. Spezifikation und prototyping graphbasierter systeme. *Informatik Forschung und Entwicklung*, 11(4):191–202, 1996.

[922] Andy Schürr. Introduction to PROGRES, an attribute graph grammar based specification language. In M. Nagl, editor, *Graph-Theoretic Concepts in Computer Science*, volume 411 of *Lecture Notes in Computer Science*, pages 151–165, 1990.

[923] Andy Schürr. IPSEN-Environment: An Integrated and Incremental Project Support ENvironment. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, page 66. Springer-Verlag, 1991.

[924] Andy Schürr. *Operationales Spezifizieren mit programmierten Graphersetzungssystemen: formale Definitionen Anwendungsbeispiele und Werkzeugunterstützung.* Deutscher Universitäts-Verlag, Wiesbaden, 1991.

[925] Andy Schürr. PROGRES: A VHL-Language Based on Graph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 641–659. Springer-Verlag, 1991.

[926] Andy Schürr. PROGRES-Editor: A Text-Oriented Hybrid Editor for PROgrammed Graph REwriting SyStems. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, page 67. Springer-Verlag, 1991.

[927] Andy Schürr. Rapid programming with graph rewrite rules. In *USENIX Symp. Very High Level Languages (VHLL),Santa Fee, New Mexico*, pages 83–100, 1994.

[928] Andy Schürr. Logic based programmed structure rewriting systems. *Fundamenta Informaticae*, XXVII, 1996. To appear.

[929] Andy Schürr. Programmed graph transformations and graph transformation units in GRACE. In *Graph Grammars and Their Application to Computer Science*, Lecture Notes in Computer Science, 1996. To appear.

[930] Andy Schürr. Programmed Graph Transformations and Graph Transformation Units in GRACE. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 122–136. Springer-Verlag, 1996.

[931] Andy Schürr. Programmed graph replacement systems. In G. Rozenberg, editor, *Handbook of Graph Grammars and Computing by Graph Transformation. Vol. I: Foundations*, chapter 7, pages 479–546. World Scientific, 1997.

[932] Rüdiger Schuster. *Graphgrammatiken und Grapheinbettung — Algorithmen und Komplexität*. PhD thesis, Passau, 1987.

[933] A. Schütte. *Spezifikation und Generierung von Übersetzern für Graph-Sprachen durch attributierte Graph-Grammatiken*. PhD thesis, EWH Koblenz, 1987. In German.

[934] A. Schütte. *Spezifikation und Generierung von Übersetzern für Graph-Sprachen durch attributierte Graph-Grammatiken, Ph.D. Thesis*. Express-Edition, Berlin, 1987.

[935] A. Schütte. *Spezifikation und Generierung von Übersetzern für Graphsprachen durch attributierte Grammatiken*. Express Edition, 1987. Dissertation, EWH Koblenz.

[936] Holger Schween and Gabriele Taentzer. Movement of objects in configuration spaces modelled by graph grammars. In H. Ehrig, H.-J. Kreowski, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 660–675, 1991.

[937] Detlef Seese. The structure of the models of decidable monadic theories of graphs. *Preprint 1987, to appear in the Journ. of Pure and Applied Logic*, ??

[938] Detlef Seese. Tree-partite graphs and the complexity of algorithms. In L. Budach, editor, *Fundamentals of Computation Theory*, volume 199 of *Lecture Notes in Computer Science*, pages 412–421, 1985.

[939] Helmut Seidl. Finite tree automata with cost functions. In J.-C. Raoult, editor, *CAAP 92*, volume 581 of *Lecture Notes in Computer Science*, pages 279–299, 1992.

[940] Helmut Seidl. Single-valuedness of tree transducers is decidable in polynomial time. *Theoretical Computer Science*, 106:135–181, 1992.

[941] Helmut Seidl. Equivalence of finite-valued tree transducers is decidable. *Mathematical Systems Theory*, 27:285–346, 1994.

[942] Helmut Seidl. Finite tree automata with cost functions. *Theoretical Computer Science*, 126:113–142, 1994.

[943] Helmut Seidl. Least solutions of equations over \. In Serge Abiteboul and Eli Shamir, editors, *Automata, Languages and Programming*, volume 820 of *Lecture Notes in Computer Science*, pages 400–411, 1994.

[944] Dennis Shasha and K. Zhang. Fast algorithms for the unit cost editing distance between trees. *Journal of Algorithms*, 11:581–621, 1990.

[945] Dennis Shasha and Kaizhong Zhang. Approximate tree pattern matching. In *Pattern Matching Algorithms*, pages 341–371. Oxford University Press, 1997. ISBN 0-19-511367-5.

[946] A. Shaw. Parsing of graph representable pictures. *Journal of the ACM*, 17:453–481, 1970.

[947] A. C. Shaw. A formal description schema as a basis for picture processing systems. *Information and Control*, 14:9–52, 1969.

[948] M.-J. Sheu and T. J. Long. UP and the low and high heirarchies: A relativized separation. In W. Kuich, editor, *Automata, Languages and Programming, 19th International Colloquium, Wien, Austria*, number 623 in Lecture Notes in Computer Science, pages 174–185. Springer-Verlag, 1992.

[949] G. Siromoney and R. Siromoney. Radial grammars and biological systems. In *Proceedings of the Conference on Biologically motivated Automata Theory*, pages 92–96, 1974. MITRE Corp. McLean Va.

[950] G. Siromoney, R. Siromoney, and K. Krithivasan. Abstract families of matrices and picture languages. *Computer Graphics and Image Processing*, 1, 1972.

[951] G. Siromoney, R. Siromoney, and K. Krithivasan. N-dimensioal array languages and description of crystal symmetry, 1973. Proceedings of the India Academy of Science.

[952] G. Siromoney, R. Siromoney, and K. Krithivasan. Picture languages with array rewriting rules. *Information and Control*, 23(5):447–470, 1973.

[953] R. Siromoney. On equal matrix languages. *Information and Control*, 14(2):135–151, 1969.

[954] R. Siromoney and K. Subramanian. Selective substitution array grammars. *Information Science*, 25(1):73–83, 1981.

[955] Rani Siromoney. Advances in Array Languages. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 549–563. Springer-Verlag, 1987.

[956] Rani Siromoney and K. G. Subramanian. Space-Filling Curves and Infinite Graphs. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 380–391. Springer-Verlag, 1983.

[957] K. Skodinis and Egon Wanke. The Bounded Degree Problem for Non-Obstructing eNCE Graph Grammars. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 211–224. Springer-Verlag, 1996.

[958] Kostantin Skodinis and Wanke. The bounded degree problem for nonobstructing eNCE graph grammars. Submitted for publication, 1995.

[959] Kostantin Skodinis and Wanke. The complexity of the bounded degree problem for eNCE graph grammars. Submitted for publication, 1995.

[960] Kostantin Skodinis and Wanke. Emptiness problems of eNCE graph languages. *Journal of Computer and System Sciences*, 51:472–485, 1995.

[961] Kostantin Skodinis and Wanke. Exponential time analysis of confluent and boundary eNCE graph languages. In W. Mayr, Ernst, Gunter Schmidt, and Gottfried Tinhofer, editors, *Graph-Theoretic Concepts in Computer Science*, volume 903 of *Lecture Notes in Computer Science*, pages 180–192, 1995.

[962] Ronan Sleep, Rinus Plasmeijer, and Marko van Eekelen, editors. *Term Graph Rewriting. Theory and Practice*, Chichester, 1993. John Wiley.

[963] A. O. Slisenko. Context-free graph grammars as a tool for describing polynomial-time subclasses of hard problems. *Information Processing Letters*, 14:52–56, 1982.

[964] G. Sobbe. Modellierung und Generierung von Softwareentwickluingsumgebungen mit Graphgrammatiken. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1995.

[965] Eric Sopena. Combinatorial hypermap rewriting. In P. Lescanne, editor, *Rewriting Techniques and Applications*, volume 256 of *Lecture Notes in Computer Science*, pages 62–73, 1987. To appear in Theoretical Computer Science.

[966] J. F. Sowa. *Conceptual Structures: Information Processing in Minds and Machines*. Addison-Wesley, Reading, Mass., 1984.

[967] J. F. Sowa. Semantic networks. In S. C. Shapiro, editor, *Encyclopedia of Artificial Intelligence 2*. John Wiley & Sons, New York, 1987.

[968] John F. Sowa. Definitional Mechanisms for Conceptual Graphs. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 426–439. Springer-Verlag, 1979.

[969] A. Speulmanns. Visuelles Programmieren mit Graphersetzungsregeln. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1995.

[970] R. Spielmann. Entwicklung einer Basisschicht zur Graphgrammatikinterpretation. Diplomarbeit, Lehrstuhl für Informatik III, RWTH Aachen, 1989.

[971] J. Staples. Computation on graph-like expressions. *Theoretical Computer Science*, 10:171–185, 1980.

[972] J. Staples. Optimal evaluations of graph-like expressions. *Theoretical Computer Science*, 10:297–316, 1980.

[973] J. Staples. Speeding up subtree replacement systems. *Theoretical Computer Science*, 11:39–47, 1980.

[974] J. Staples. Two-level expression represntation for faster evaluation. In H. Ehrig, M. Nagl, and G. Rozenberg, editors, *Graph Grammars and Their Application to Computer Science, 2nd International Workshop, Haus Ohrbeck, Germany*, number 153 in Lecture Notes in Computer Sciences, pages 392–404. Spinger-Verlag, 1983.

[975] John Staples. A Graph-Like Lambda Calculus for which Leftmost-Outermost Reduction is Optimal. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 440–455. Springer-Verlag, 1979.

[976] John Staples. Two-Level Expression Representation for Faster Evaluation. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 392–404. Springer-Verlag, 1983.

[977] P. Starke. Graph grammars for petri net processes. *Elektronische Informations-Verarbeitung und Kybernetik*, 19(4/5):199–233, 1983.

[978] Maciej M. Syslo. Characterization of outerplanar graphs. *Discrete Mathematics*, 26:47–53, 1979.

[979] Maciej M. Syslo. The subgraph isomorphism problem for outerplanar graphs. *Theoretical Computer Science*, 17:91–97, 1982.

[980] Maciej M. Syslo. NP-complete problems on some tree-structured graphs: A review. In M. Nagl and J. Perl, editors, *Graph-Theoretic Concepts in Computer Science*, pages 342–353. Trauner Verlag, Linz, 1983.

[981] V. Baudin M. Diaz T. Villemur, K. Drira. Services, methodologies and platforms for cooperative environments. In *OPODIS 2001 : 5th International Colloquium on Principles of Distributed Systems*, Manzanillo, Colima, Mexico, December 2001.

[982] G. Taentzer. *Parallel and Distributed Graph Transformation: Formal Description and Application to Communication based Systems*. PhD thesis, Fachbereich Informatik, Technische Universität Berlin, 1996. Published by Shaker-Verlag Aachen.

[983] G. Taentzer. *Parallel and Distributed Graph Transformation: Formal Description and Application to Communication-Based Systems*. PhD thesis, TU Berlin, 1996. Shaker Verlag.

[984] G. Taentzer. Distributed graphs and graph transformation. *Applied categorical Structures*, 1997. Submitted.

[985] Gabriele Taentzer. Parallel high-level replacement systems. *Theoretical Computer Science*, 1995. To appear.

[986] Gabriele Taentzer. Hierarchically Distributed Graph Transformation. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 304–320. Springer-Verlag, 1996.

[987] Gabriele Taentzer. Hierarchically distributed graph transformations. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 304–320. Springer, 1996.

[988] Gabriele Taentzer. Towards synchronous and asynchronous graph transformations. *Fundamenta Informaticae*, 1996. To appear.

[989] Gabriele Taentzer and Martin Beyer. Amalgamated graph transformations and their use for specifying AGG — an algebraic graph grammar system. In Hans Jürgen Schneider and Hartmut Ehrig, editors, *Graph Transformations in Computer Science*, volume 776 of *Lecture Notes in Computer Science*, pages 380–394, 1994.

[990] Gabriele Taentzer and Holger Schween. Movement of Objects in Configuration Spaces modelled by Graph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 660–675. Springer-Verlag, 1991.

[991] K. Takamizawa, T. Nishizeki, and N. Saito. Linear-time computability problems on series-parallel graphs. *Journal of the ACM*, 29(3):623–641, 1982.

[992] Stefan Taubenberger. Correct translations of generalized iterated function systems to collage grammars. Technical Report 7/94, Bremen, 1994.

[993] G. Tinhofer and G. Schmidt, editors. *WG'86: International Workshop on Graph Theoretic Concepts in Computer Science*, volume 246 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1986. Continuation of the WG *Fachtagung*.

[994] G. Tinhofer, G. Schmidt, and E. Mayr, editors. *WG'94: 20th International Workshop on Graph Theoretic Concepts in Computer Science*, volume 903 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1994. Continuation of the WG *Fachtagung*.

[995] G. Tucan. On the complexity of graph grammars. *Acta Cybernetica*, 6:271–280, 1983.

[996] G. Turán. On the complexity of graph grammars. *Acta Cybern.*, 6:271–281, 1983.

[997] Tadahiro Uesu. A system of graph grammars which generates all recursively enumerable sets of labelled graphs. *Tsukuba J. Math.*, 2:11–26, 1978.

[998] J. Ullman. An algorithm for subgraph isomorphism. *Journal of the ACM*, 23:31–42, 1976.

[999] P. Van Hentenryck. Constraint satisfaction in logic programming, 1989.

[1000] J. van Leeuwen, editor. *WG'88: International Workshop on Graph Theoretic Concepts in Computer Science*, volume 344 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1988. Continuation of the WG *Fachtagung*.

[1001] J. van Leeuwen, editor. *WG'93: 19th International Workshop on Graph Theoretic Concepts in Computer Science*, volume 790 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1993. Continuation of the WG *Fachtagung*.

[1002] Jan van Leeuwen. Graph algorithms. In J. van Leeuwen, editor, *Handbook of Theoretical Computer Science*, volume A, pages 193–242. Elsevier, Amsterdam, 1990.

[1003] S. A. Vere. Relational production systems. *Artificial Intelligence*, 8:47–68, 1977.

[1004] J. Vermeulen. Viability of a parsing algorithm for context sensitive graph grammars: An implementation of rekers' and schürr's graph parsing algorithm with several runtime improvements based on set theoretic considerations. Master's thesis, Vakgroep Informatica, Rijks-Universiteit te Leiden, 1996.

[1005] Walter Vogler. On hyperedge replacement and BNLC graph grammars. In M. Nagl, editor, *Graph-Theoretic Concepts in Computer Science*, volume 411 of *Lecture Notes in Computer Science*, pages 78–93, 1990.

[1006] Walter Vogler. Recognizing Edge Replacement Graph Languages in Cubic Time. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 676–687. Springer-Verlag, 1991.

[1007] Walter Vogler. On hyperedge replacement and BNLC graph grammars. *Discrete Applied Mathematics*, 46:253–273, 1993.

[1008] S. H. von Solms. Node-label controlled graph grammars with context conditions. *Int. Journal of Computer Mathematics*, 15:39–49, 1984.

[1009] A. Wagner and M. Gogolla. Defining operational behaviour of object specifications by attributed graph transformations. *Fundamenta Informaticae*, 26:407–431, 1996.

[1010] J. Wald and C. Colbourn. Steiner trees, partial 2-trees, and minimum IFI networks. *Networks*, 13:159–167, 1983.

[1011] K. Walter. Grammar forms and grammar homomorphisms. *Acta Informatica*, 7:75–93, 1976.

[1012] J. T-L. Wang, K. Zhang, Dennis Shasha, and F. Shih. Exact and approximate algorithms for unordered tree matching. *IEEE Transactions on Systems, Man and Cybernetics*, 24(4):668–678, 1994.

[1013] Jason T. L. Wang, Bruce A. Shapiro, Dennis Shasha, Kaizhong Zhang, and Kathleen Currey. An algorithm for finding the largest approximately common substructures of two trees. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 20(8):889–895, 1998.

[1014] Egon Wanke. PLEXUS: A system for implementing hierarchical graph algorithms. In R. Cori and M. Wirsing, editors, *STACS'88*, volume 294 of *Lecture Notes in Computer Science*, pages 403–404, 1988.

[1015] Egon Wanke. *Algorithmen und Komplexitätsanalyse für die Verarbeitung hierarchisch definierter Graphen und hierarchisch definierter Graphfamilien.* PhD thesis, Paderborn, 1989.

[1016] Egon Wanke. Algorithms for graph problems on BNLC structured graphs. *Information and Computation*, 94:93–122, 1991.

[1017] Egon Wanke. On the decidability of integer subgraph problems on context-free graph languages. In L. Budach, editor, *Proc. Fundamentals of Computation Theory*, volume 529 of *Lecture Notes in Computer Science*, pages 415–426. Springer, 1991.

[1018] Egon Wanke. PLEXUS: Tools for Analyzing Graph Grammars. In Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. 4th. Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 532 of *Lecture Notes in Computer Science*, pages 68–69. Springer-Verlag, 1991.

[1019] Egon Wanke. The complexity of connectivity problems on context-free graph languages. *Journal of Computer and System Sciences*, 49:57–82, 1994.

[1020] Egon Wanke. On the decidability of certain integer subgraph problems on context-free graph languages. *Information and Computation*, 113:26–49, 1994.

[1021] Egon Wanke and Kostantin Skodinis. The bounded degree problem for non-obstructing eNCE graph grammars. In J. Cuny, H. Ehrig, G. Engels, and G. Rozenberg, editors, *Proc. Fifth Intl. Workshop on Graph Grammars and Their Application to Comp. Sci.*, volume 1073 of *Lecture Notes in Computer Science*, pages 211–224. Springer, 1996.

[1022] Egon Wanke and Manfred Wiegers. Undecidability of the bandwidth problem on linear graph languages. *Information Processing Letters*, 33:193–197, 1989.

[1023] F. Wankmüller. Characterization of Graph Classes by Forbidden Structures and Reductions. In Hartmut Ehrig, Manfred Nagl, and Grzegorz Rozenberg, editors, *Proc. 2nd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 153 of *Lecture Notes in Computer Science*, pages 405–414. Springer-Verlag, 1983.

[1024] F. Wankmüller. Application of Graph Grammars in Music Composing Systems. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 580–592. Springer-Verlag, 1987.

[1025] Frank Wankmüller. *Charakterisierung von Graphklassen durch verbotene Strukturen und Reduktionen.* PhD thesis, Dortmund, 1982.

[1026] Frank Wankmüller. Characterization of graph classes by forbidden structures and reductions. *Lecture Notes in Computer Science*, 153:405–414, 1983.

[1027] Frank Wankmüller. Applications of graph grammars in music composing systems. *Lecture Notes in Computer Science*, 291:580–592, 1987.

[1028] D. Weber. Daten-graphen und deren transformation: Ein konzept zur spezifikation von daten-typen. Technical Report 8, Friedrich-Alexander-Universität Erlangen-Nürnberg, 1978.

[1029] Emo Welzl. On the set of all subgraphs of the graphs in a boundary NLC graph language. In G. Rozenberg and A. Salomaa, editors, *The Book of L*, pages 445–459. Springer-Verlag, Berlin, 1986.

[1030] Emo Welzl. Boundary NLC and partition controlled graph grammars. *Lecture Notes in Computer Science*, 291:593–609, 1987.

[1031] Emo Welzl. Boundary NLC and Partition Controlled Graph Grammars. In Hartmut Ehrig, Manfred Nagl, Grzegorz Rozenberg, and Azriel Rosenfeld, editors, *Proc. 3rd Int. Workshop on Graph-Grammars and Their Application to Computer Science*, volume 291 of *Lecture Notes in Computer Science*, pages 593–609. Springer-Verlag, 1987.

[1032] B. Westfechtel. *Revisions- und Konsistenzkontrolle in einer integrierten Softwareentwicklungsumgebung*, volume 280 of *Informatik-Fachberichte*. Springer-Verlag, Berlin, 1991.

[1033] B. Westfechtel. Using programmed graph rewriting for the formal specification of a configuration management system. In G. Tinhofer, editor, *Proceedings WG' 94 Workshop on Graph-Theoretic Concepts in Computer Science*, volume 903 of *Lecture Notes in Computer Science*, pages 164–179. Springer-Verlag, 1994.

[1034] B. Westfechtel. Integrated product and process management for engineering design applications. *Integrated Computer-Aided Engineering*, 3(1), 1996.

[1035] B. Westfechtel. *Graph based Models and Tools for Managing Development Processes*, volume 1646 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, 1999. Venia Legendi Thesis (Habilitation).

[1036] H. Whitney. Congruent graphs and the connectivity of graphs. *American Journal of Mathematics*, 54:150–168, 1932.

[1037] Jack C. Wileden. Relationships between Graph Grammars and the Design and Analysis of Concurrent Software. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 456–463. Springer-Verlag, 1979.

[1038] Anne Wilharm. Anwendung der Theorie von Graphgrammatiken auf die Spezifikation der Prozess-Steuerung von Eisenbahnsystemen. Technical Report 81-15, Berlin, 1981.

[1039] Linda M. Wills. Using Attributed Flow Graph Parsing to Recognize Clichés in Programs. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 170–184. Springer-Verlag, 1996.

[1040] A. Winter. *Visuelles Programmieren mit Graph-Transformationen*. PhD thesis, Fakultät für Mathematik, Naturwissenschaften und Informatik, Rheinisch-Westfälische Technische Hochschule Aachen, 1999.

[1041] A. J. Winter. *Guided Prototype Generation*. RWTH Aachen, D-52056 Aachen, Germany.

[1042] K.-U. Witt. Finite graph acceptors and regular graph languages. *Information and Control*, 50(3):242–258, 1981.

[1043] W. A. Woods. Transition network grammars for natural language analysis. *Comm. ACM*, 13(10):591–606, 1970.

[1044] A. Wu and Azriel Rosenfeld. Cellular graph automata. *Lecture Notes in Computer Science*, 73:464–475, 1979.

[1045] A. Wu and Azriel Rosenfeld. Cellular graph automata I. *Information and Control*, 42:305–329, 1979.

[1046] A. Wu and Azriel Rosenfeld. Cellular graph automata II. *Information and Control*, 42:330–353, 1979.

[1047] A. Wu and Azriel Rosenfeld. Sequential and cellular graph automata. *Information Sciences*, 20:57–68, 1980.

[1048] Angela Wu and Azriel Rosenfeld. Cellular Graph Automata. In Volker Claus, Hartmut Ehrig, and Grzegorz Rozenberg, editors, *Proc. 1st Int. Workshop on Graph-Grammars and Their Application to Computer Science and Biology*, volume 73 of *Lecture Notes in Computer Science*, pages 464–475. Springer-Verlag, 1979.

[1049] K. Yamazaki. A hierarchy of the class of apex nlc graph languages by bounds on the number of nonterminal nodes in productions. *Acta Informatica*, 34(5), 1997.

[1050] K. Zhang and Dennis Shasha. Simple fast algorithms for the editing distance between trees and related problems. *Siam Journal of Computing*, 18(6):1245–1262, 1989.

[1051] K. Zhang, Dennis Shasha, and R. Statman. On the editing distance between unordered labeled trees. *Information Processing Letters*, 42:133–139, 1992.

[1052] K. Zhang, J. T. L. Wang, and Special Issue on Computational Biology Dennis Shasha. On the editing distance between undirected acyclic graphs. *International Journal of Foundations of Computer Science*, 7(1):43–57, 1996.

[1053] K. Zhang, T-L. Wang, and Dennis Shasha. Approximate tree matching in the presence of variable length don't cares. *Journal of Algorithms*, 16:33–66, 1994.

[1054] Gaby Zinßmeister and Carolyn L. McCreary. Drawing Graphs with Attribute Graph Grammars. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 443–453. Springer-Verlag, 1996.

[1055] A. Zündorf. Implementation of the imperative / rule based language PROGRES. Technical Report 92-38, Department of computer science III, Aachen University of Technology, Germany, 1992.

[1056] A. Zündorf. A heuristic for the subgraph isomorphism problem in executing progres. Technical Report 93-15, Fachgruppe Informatik, RWTH Aachen, 1993.

[1057] A. Zündorf. A heuristique for the subgraph isomorphism problem in executing PROGRES. Technical Report 93-05, Department of Computer Science III, Aachen University of Technology, 1993.

[1058] A. Zündorf. *Programmierte Graph-Ersetzungs-Systeme: Spezifikation, Implementierung und Anwendung in einer integrierten Entwicklungs-Umgebung.* PhD thesis, Fakultät für Mathematik, Naturwissenschaften und Informatik, Rheinisch-Westfälische Technische Hochschule Aachen, 1995. Published by Deutscher Universitätsverlag, Wiesbaden.

[1059] A. Zündorf. *Eine Entwicklungsumgebung für programmierte Graphersetzungssysteme.* Deutscher Universitätsverlag, Wiesbaden, 1996. Dissertation, RWTH Aachen.

[1060] A. Zündorf and A. Schürr. Nondeterministic control structures for graph rewriting systems. In G. Schmidt and R. Berghammer, editors, *Graph-Theoric Concepts in Computer Science, 17th International Workshop, WG'91, Fishbachau, Germany*, number 643 in Lecture Notes in Computer Science, pages 48–62. Springer-Verlag, 1991.

[1061] A. Zündorf and A. Schürr. Nondeterministic control structures for graph rewriting systems. Technical Report 91-17, Lehrstuhl fur Informatik III, Aachen University of Technology, Germany, 1991.

[1062] Albert Zündorf. *Eine Entwicklungsumgebung für PROgrammierte GRaphErsetzungsSysteme.* PhD thesis, RWTH Aachen, Germany, 1995.

[1063] Albert Zündorf. *Eine Entwicklungsumgebung für PROgrammierte GRaphErsetzungsSysteme.* Deutscher Universitätsverlag, Wiesbaden, 1995.

[1064] Albert Zündorf. Graph pattern matching in PROGRES. In *Graph Grammars and Their Application to Computer Science*, Lecture Notes in Computer Science, 1996. To appear.

[1065] Albert Zündorf. Graph Pattern Matching in PROGRES. In Janice E. Cuny, Hartmut Ehrig, Gregor Engels, and Grzegorz Rozenberg, editors, *Proc. 5th Int. Workshop on Graph Grammars and their Application to Computer Science*, volume 1073 of *Lecture Notes in Computer Science*, pages 454–468. Springer-Verlag, 1996.

[1066] Albert Zündorf and Andy Schürr. Nondeterministic control structures for graph rewriting systems. In G. Schmidt and R. Berghammer, editors, *Graph-Theoretic Concepts in Computer Science*, volume 570 of *Lecture Notes in Computer Science*, pages 48–62, 1992.