



A Bibliography of Aspect-Oriented Software Development, Version 1.1

Robert E. Filman

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A bibliography of the literature related to Aspect-Oriented Software Development.

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Version 1.1

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A bibliography of the literature related to Aspect-Oriented Programming.

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This is meant to be an evolving document. Please send additions, corrections, comments and disagreements to the author at rfilman@mail.arc.nasa.gov. There's more detail in the bibtex version of this file (see, for example, <http://www.aosd.net/aosd-bibliography.bib>).

References

- [1] Franz Achermann. Language support for feature mixing. In ICSE-AOP00 [330].
- [2] Franz Achermann. *Forms, Agents and Channels - Defining Composition Abstraction with Style*. PhD thesis, University of Berne, January 2002.
- [3] Franz Achermann and Oscar Nierstrasz. Explicit Namespaces. In Jürg Gutknecht and Wolfgang Weck, editors, *Modular Programming Languages*, volume 1897 of *LNCS*, pages 77–89. Springer-Verlag, September 2000.
- [4] Franz Achermann and Oscar Nierstrasz. Applications = Components + Scripts – A Tour of Piccola. In Mehmet Akşit, editor, *Software Architectures and Component Technology*, pages 261–292. Kluwer, 2001.
- [5] M. Akşit. The analysis and design of distributed systems. In *Addendum to the Proc. on Object-Oriented Programming Systems, Languages and Applications*, page 223, 1992.
- [6] M. Akşit. Composition and separation of concerns in the object-oriented model. *ACM Computing Surveys*, 28A(4), 1996.
- [7] M. Akşit, editor. *Software Architectures and Component Technology: The State of the Art in Research and Practice*. Kluwer Academic Publishers, 2001.
- [8] M. Akşit and L. Bergmans. Composing multiple-client-multiple-server synchronizations. In *Proc. IEEE Joint Workshop on Parallel and Distributed Systems*, pages 269–282, April 1997.
- [9] M. Akşit and L. Bergmans. Examples of reusing synchronization code in aspect-oriented programming using composition-filters. In *Proc. 5th. Maghrebian Conf. Software Engineering and Artificial Intelligence (MCSEAI'98)*, pages 257–272, December 1998.
- [10] M. Akşit and L. Bergmans. Guidelines for identifying obstacles when composing distributed systems from components. In Akşit [7], pages 29–56.
- [11] M. Akşit, L. Bergmans, and S. Vural. An object-oriented language-database integration model: The composition-filters approach. In O. Lehrmann Madsen, editor, *Proc. 7th European Conf. Object-Oriented Programming*, pages 372–395. Springer-Verlag Lecture Notes in Computer Science, 1992.
- [12] M. Akşit and J. Bosch. Issues in object-oriented real time language design. In W. Hahlang and A. Stoyenko, editors, *Real Time*

- Computing*, pages 510–511. Springer Verlag Nato ASI Series, 1992.
- [13] M. Akşit, J. Bosch, W. v.d. Sterren, and L. Bergmans. Real-time specification inheritance anomalies and real-time filters. In Tokoro and Pareschi [639], pages 386–407.
 - [14] M. Akşit and B. Tekinerdoğan. Component composability issues in object-oriented programming. *XOOTIC Magazine*, 5(2):15–20, December 1997.
 - [15] M. Akşit and B. Tekinerdoğan. Reusing and composing components: Problems and solutions. In *Proc. Smalltalk und Java in Industrie und Ausbildung 97.(STJA 97)*. September 1997.
 - [16] M. Akşit and B. Tekinerdoğan. Aspect-oriented programming using composition filters. In S. Demeyer and J. Bosch, editors. *Object-Oriented Technology. ECOOP'98 Workshop Reader*, page 435. Springer Verlag, July 1998.
 - [17] M. Akşit and B. Tekinerdoğan. Solving the modeling problems of object-oriented languages by composing multiple aspects using composition filters. In ECOOP-AOP98 [218].
 - [18] M. Akşit, B. Tekinerdoğan, and L. Bergmans. Achieving adaptability through separation and composition of concerns. In M. Muhlhauser, editor, *Special Issues in Object-Oriented Programming*, pages 12–23. dpunkt verlag, 1996.
 - [19] M. Akşit, K. Wakita, J. Bosch, L. Bergmans, and A. Yonezawa. Abstracting object-interactions using composition-filters. In R. Guerraoui, O. Nierstrasz, and M. Riveill, editors, *Object-Based Distributed Processing*, pages 152–184. Springer-Verlag Lecture Notes in Computer Science, 1993.
 - [20] Mehmet Akşit. Issues in aspect-oriented programming. In ECOOP-AOP97 [217].
 - [21] Mehmet Akşit, editor. *Proc. 2nd Int' Conf. on Aspect-Oriented Software Development (AOSD-2003)*. ACM Press, March 2003.
 - [22] Mehmet Akşit and Ziad Choukair, editors. *Proc. 2nd Int'l Workshop on Aspect Oriented Programming for Distributed Computing Systems (ICDCS-2002), Vol. 2*, July 2002.
 - [23] Mehmet Akşit and Mira Mezini, editors. *Net.Object Days 2002*, October 2002.
 - [24] Mehmet Akşit, Bedir Tekinerdoğan, and Lodewijk Bergmans. The six concerns for separation of concerns. In ECOOP-AOP01 [216].
 - [25] Faisal Akkai, Atef Bader, and Tzilla Elrad. Dynamic weaving for building reconfigurable software systems. In OOPSLA-AOP01 [488].
 - [26] Omar Aldawud, Atef Bader, and Tzilla Elrad. Weaving with statecharts. In AOSD-UML02 [45].
 - [27] Omar Aldawud, Tzilla Elrad, and Atef Bader. A UML profile for aspect oriented modeling. In OOPSLA-AOP01 [488].
 - [28] Jonathan Aldrich. Challenge problems for separation of concerns. In OOPSLA-AOP00 [487].
 - [29] Roger T. Alexander and James M. Bieman. Challenges of aspect-oriented technology. In *Workshop on Software Quality, 24th Int'l Conf. Software Engineering*, May 2002.
 - [30] Davide Ancona, Giovanni Lagorio, and Elena Zucca. Jam—a smooth extension of Java with mixins. In Bertino [85], pages 154–178.
 - [31] Ken Anderson. An example of using collaborator and adapters to reuse a synchronization pattern. In OOPSLA-AOP00 [487].
 - [32] L. Andrade and J. L. Fiadeiro. An architectural approach to auto-adaptive systems. In Akşit and Choukair [22].
 - [33] Luis Andrade, José Luiz Fiadeiro, João Gouveia, and Georgios Koutsoukos. Separating computation, coordination and configuration. *Journal of Software Maintenance and Evolution: Research and Practice*, 14(5):353–369, 2002.
 - [34] James Andrews. Using process algebra as a foundation for programming by separation of concerns. In ICSE-AOP01 [331].
 - [35] James H. Andrews. Process-algebraic foundations of aspect-oriented programming. In Yonezawa and Matsuoka [684], pages 187–209.

- [36] James H. Andrews. Using process algebra as a foundation for programming by separation of concerns. In ECOOP-AOP01 [216].
- [37] M. Antunes, H. Miranda, A. Rito Silva, L. Rodrigues, and J. Martins. Separating replication from distributed communication: Problems and solutions. In Choukair [132], pages 103–110.
- [38] João Araújo, Ana Moreira, Isabel Brito, and Awais Rashid. Aspect-oriented requirements with uml. In Kandé et al. [342].
- [39] João Paulo Barros and Luís Gomes. Activities as behaviour aspects. In Kandé et al. [342].
- [40] *Workshop on Identifying, Separating and Verifying Concerns in the Design (AOSD-2002)*, March 2002.
- [41] *Workshop on Early Aspects: Aspect-Oriented Requirements Engineering and Architecture Design (AOSD-2002)*, March 2002.
- [42] *FOAL 2002: Foundations of Aspect-Oriented Languages (AOSD-2002)*, March 2002.
- [43] *First AOSD Workshop on Aspects, Components, and Patterns for Infrastructure Software (AOSD-2002)*, March 2002.
- [44] *Modular Representation and Interpretation of Concerns in XML (AOSD-2002)*, March 2002.
- [45] *Workshop on Aspect-Oriented Modeling with UML (AOSD-2002)*, March 2002.
- [46] Uwe Aßmann. A component model for invasive composition. In ECOOP-AOP00 [215].
- [47] Uwe Aßmann and Andreas Ludwig. Aspect weaving by graph rewriting. In U. W. Eisenacker and K. Czarnecki, editors, *Generative Component-based Software Engineering (GCSE)*, October 1999.
- [48] Colin Atkinson and Thomas Kühne. Separation of concerns through stratified architectures. In ECOOP-AOP00 [215].
- [49] Enis Avdicaušević, Marjan Mernik, Mitja Lenic, and Viljem Zumer. Experimental aspect-oriented language - aspectcool. In *Proceedings of the 17th symposium on Proceedings of the 2002 ACM symposium on applied computing*, pages 943–947. ACM Press, 2002.
- [50] Boris Bachmendo and Rainer Unland. Aspect-based workflow evolution. In Rashid [552].
- [51] Atef Bader and Tzilla Elrad. The adaptive arena: Language constructs and architectural abstractions for concurrent object-oriented systems. In *ICPADS 98*, 1998.
- [52] Atef Bader and Tzilla Elrad. Framework and design pattern for concurrent passive objects. In *Proc. IASTED/SE 98*, 1998.
- [53] Jason Baker and Wilson Hsieh. Runtime aspect weaving through metaprogramming. In Kiczales [368], pages 86–98.
- [54] Elisa Baniassad, Gail Murphy, Christa Schwanninger, and Michael Kircher. Managing crosscutting concerns during software evolution tasks: An inquisitive study. In Kiczales [368], pages 120–126.
- [55] Elisa L.A. Baniassad, Gail C. Murphy, and Christa Schwanninger. Determining the “why” of concerns. In ECOOP-AOP01 [216].
- [56] Elisa L.A. Baniassad, Gail C. Murphy, and Christa Schwanninger. Determining the “why” of concerns. In ICSE-AOP01 [331].
- [57] Elisa L.A. Baniassad, Gail C. Murphy, Christa Schwanninger, and Michael Kircher. Where are programmers faced with concerns? In OOPSLA-AOP00 [487].
- [58] D. Bardou. Roles, subjects and aspects: How do they relate? In ECOOP-AOP98 [218].
- [59] Luciano Porto Barreto, R mi Douence, Gilles Muller, and Mario S dholt. Programming OS schedulers with domain-specific languages and aspects: New approaches for OS kernel engineering. In AOSD-PAT02 [43].
- [60] Paul G. Bassett. *Framing Software Reuse: Lessons From the Real World*. Prentice Hall PTR, Englewood Cliffs, New Jersey, 1996.
- [61] Adam Batenin and Eamonn O’Neill. Towards unanticipated composition of concerns in hyperspaces. In AOSD-AOD02 [40].
- [62] Don Batory. Refinements and separation of concerns. In ICSE-AOP00 [330].
- [63] Don Batory, Clay Johnson, Bob MacDonald, and Dale von Heeder. Achieving extensibility through product-lines and domain-specific

- languages: A case study. *ACM Transactions on Software Engineering and Methodology (TOSEM)*, 11(2):191–214, 2002.
- [64] Don Batory, Robert E. Lopez-Herrejon, and Jean-Philippe Martin. Generating product-lines of product-families. In *Proc. 17th IEEE Int'l Conf. on Automated Software Engineering*, pages 81–92, September 2002.
 - [65] Joachim Bayer. Towards engineering product lines using concerns. In ICSE-AOP00 [330].
 - [66] Christian Becker. Quality of service and O.O. oriented middleware multiple concerns and their separation. In Choukair [132], pages 117–126.
 - [67] Christian Becker and Kurt Geihls. Quality of service - aspects of distributed programs. In ICSE-AOP98 [332].
 - [68] U. Becker. D2AL: A design-based aspect language for distribution control. In ECOOP-AOP98 [218].
 - [69] Georg Beier and Markus Kern. Aspects in uml models from a code generation perspective. In Kandé et al. [342].
 - [70] L. Berger, A. M. Dery, and M. Fornarino. Interactions between objects: An aspect of object-oriented languages. In ICSE-AOP98 [332].
 - [71] L. Berger, A.M. Dery, and M. Fornarino. Interactions between objects: An aspect of object-oriented languages. In ECOOP-AOP98 [218].
 - [72] L. Bergmans. *Composing Concurrent Objects*. PhD thesis, University of Twente, 1994.
 - [73] L. Bergmans. The composition filters object model. Technical report, Dept. of Computer Science, University of Twente, 1994.
 - [74] L. Bergmans and M. Akşit. Reusability problems in object-oriented concurrent programs. In *Proc. ECOOP'92 Workshop Object-Based Concurrency and Reuse*, June 1992.
 - [75] L. Bergmans and M. Akşit. Composing synchronisation and real-time constraints. *Journal of Parallel and Distributed Computing*, 36:32–52, 1996.
 - [76] L. Bergmans and M. Akşit. Aspects and crosscutting in layered middleware systems. In *RM2000 Workshop in Reflective Middleware*, April 2000.
 - [77] L. Bergmans and M. Akşit. Composing cross-cutting concerns using composition filters. *Comm. ACM*, 44(10):51–57, October 2001.
 - [78] L. Bergmans, M. Akşit, and J. Bosch. Composition filters: Extended expressiveness for oopls. In *OOPSLA '92 Workshop Object-Oriented Programming Languages: The Next Generation*, 1992.
 - [79] L. Bergmans, M. Akşit, and B. Tekinerdoğan. Aspect composition using composition filters. In Akşit [7], pages 357–382.
 - [80] Lodewijk Bergmans and Mehmet Akşit. Composing software from multiple concerns: A model and composition anomalies. In ICSE-AOP00 [330].
 - [81] Lodewijk Bergmans, Bedir Tekinerdoğan, Maurice Glandrup, and Mehmet Akşit. On composing separated concerns: Composability and composition anomalies. In OOPSLA-AOP00 [487].
 - [82] Lodewijk M. J. Bergmans and Mehmet Akşit. How to deal with encapsulation in aspect-orientation. In OOPSLA-AOP01 [488].
 - [83] Lodewijk M.J. Bergmans and Mehmet Akşit. Analyzing multi-dimensional programming in AOP and composition filters. In OOPSLA-AOP99 [490].
 - [84] Paul Bergstein. *Managing the Evolution of Object-Oriented Systems*. PhD thesis, Northeastern University, 1994.
 - [85] E. Bertino, editor. *ECOOP 2000—Object-Oriented Programming: 14th European Conference, LNCS 1850*. Springer Verlag, June 2000.
 - [86] Antoine Beugnard. How to make aspect reusable, a proposition. In ECOOP-AOP99 [219].
 - [87] Jean Bezivin. Aspect-oriented modeling: Oxymoron or pleonasm? In Akşit and Choukair [22].
 - [88] Andrew P. Black and Mark P. Jones. Perspectives on software. In OOPSLA-AOP00 [487].

- [89] Andrew P. Black and Jonathan Walpole. Aspects of information flow. In ECOOP-AOP00 [215].
- [90] L. Blair and G. S. Blair. The impact of aspect-oriented programming on formal methods. Technical Report MPG-98-08, Lancaster University, 1998.
- [91] L. Blair, G. S. Blair, and A. Andersen. Separating function behaviour and performance constraints: Aspect-oriented specification. Technical Report MPG-98-07, Lancaster University, 1998.
- [92] L. Blair and G.S. Blair. The impact of aspect oriented programming on formal methods. In ECOOP-AOP98 [218].
- [93] Lynne Blair and Gordon Blair. A tool suite to support aspect-oriented specification. In ECOOP-AOP99 [219].
- [94] G. Blank and G. Vayngrib. Aspects of Enterprise Java Beans. In ECOOP-AOP98 [218].
- [95] M. Blay-Fornarino, A. M. Pinna-Dery, and M. Riveill. Configuring distributed applications. In Akşit and Choukair [22].
- [96] K. Böllert. Aspect-oriented programming case study: System management application. In ECOOP-AOP98 [218].
- [97] Kai Böllert. On weaving aspects. In ECOOP-AOP99 [219].
- [98] J. Bosch and M. Akşit. Composition-filters based real-time programming. In *OOPSLA '92 Workshop on Evaluation of Object-Oriented Technology in Real-Time Systems: Past, Present & Future*, 1992.
- [99] Jan Bosch, editor. *Generative and Component-Based Software Engineering, Third International Conference (GCSE 2001), LNCS 2186*. Springer-Verlag Lecture Notes in Computer Science, September 2001.
- [100] Philippe Bouaziz and Lionel Seinturier. From software parameterization to software profiling. In Rashid [552].
- [101] Noury Bouraqadi. Concern oriented programming using reflection. In OOPSLA-AOP00 [487].
- [102] Noury M. N. Bouraqadi-Saâdani and Thomas Ledoux. How to weave? In ECOOP-AOP01 [216].
- [103] Laurent Boussard. Towards a pragmatic composition model of CORBA services based on AspectJ. In ECOOP-AOP00 [215].
- [104] Alexandre M. Braga, Ricardo Darab, and Cecilia M. F. Rubira. A meta-object protocol for secure composition of security mechanisms. In OOPSLA-AOP00 [487].
- [105] Johan Brichau. Declarative composable aspects. In OOPSLA-AOP00 [487].
- [106] Johan Brichau, Wolfgang De Meuter, and Kris De Volder. Jumping aspects. In ECOOP-AOP00 [215].
- [107] I. Brito, A. Moreira, and J. Araujo. A requirements model for quality attributes. In AOSD-EA02 [41].
- [108] Alex Brodsky, Dima Brodsky, Ida Chan, Yvonne Coady, Stephan Gudmundson, Jody Pomkoski, and Joon Suan Ong. Coping with evolution: Aspects vs. aspirin. In OOPSLA-AOP01 [488].
- [109] Adam Brown, Richard Cardone, Sean McDermid, and Calvin Lin. Using mixins to build flexible widgets. In Kiczales [368], pages 76–85.
- [110] David Bruce and Nick Exon. Alternatives to aspect-oriented programming? In Rashid [552].
- [111] Eric Bruneton and Michel Riveill. Experiments with JavaPod, a platform designed for the adaptation of non-functional properties. In Yonezawa and Matsuoka [684], pages 52–72.
- [112] Avi Bryant, Andrew Catton, Kris De Volder, and Gail Murphy. Explicit programming. In Kiczales [368], pages 10–18.
- [113] Martin Büchi and Wolfgang Weck. Generic wrappers. In Bertino [85], pages 201–225.
- [114] R.J.A. Buhr. A possible design notation for aspect-oriented programming. In ECOOP-AOP98 [218].
- [115] G. Cabri, L. Leonardi, and F. Zambonelli. Separation of concerns in agent applications by roles. In Akşit and Choukair [22].

- [116] João Cachopo, António Menezes Leitão, and António Rito-Silva. The tyranny of the file decomposition. In OOPSLA-AOP02 [489].
- [117] V. Cahill. An overview of the Coyote project. In ECOOP-AOP98 [218].
- [118] Sabine Canditt and Manfred Gunter. Aspect oriented logging in a real-world system. In AOSD-PAT02 [43].
- [119] Adeline Capouillez, Pierre Crescenzo, and Philippe Lahire. Separation of concerns in OFL. In ECOOP-AOP01 [216].
- [120] Lee Carver. Combining selector-guarded blocks. In ECOOP-AOP00 [215].
- [121] Lee Carver. A practical hyperspace application: Lessons from the option-processing task. In ICSE-AOP00 [330].
- [122] Lee Carver. Using brackets to corral jumping aspects. In OOPSLA-AOP00 [487].
- [123] Lee Carver. Building a real-world application with aspect-oriented modules and hyper/j. Master's thesis, University of California, San Diego, June 2002.
- [124] Lee Carver. Composition behaviors for application construction. In AOSD-AOD02 [40].
- [125] Lee Carver. Simplified universe construction for Hyper/J composition. In OOPSLA-AOP02 [489].
- [126] Lee Carver and William G. Griswold. Sorting out concerns. In OOPSLA-AOP99 [490].
- [127] Christina Chavez, Alessandro Garcia, and Carlos Lucena. Some insights on the use of AspectJ and Hyper/J. In Rashid [552].
- [128] Christina Chavez and Carlos Lucena. A metamodel for aspect-oriented modeling. In AOSD-UML02 [45].
- [129] Marsha Chechik and Steve Easterbrook. Reasoning about compositions of concerns. In ICSE-AOP01 [331].
- [130] Shigeru Chiba. What are the best join points? In OOPSLA-AOP01 [488].
- [131] Ruzanna Chitchyan, Ian Sommerville, and Awais Rashid. An analysis of design approaches for crosscutting concerns. In AOSD-AOD02 [40].
- [132] Zied Choukair, editor. *Proc. Int'l Workshop on Distributed Dynamic Multiservice Architectures (ICDCS-2001)*, Vol. 2, April 2001.
- [133] Mark Chu-Carroll. Software configuration management as a mechanism for multidimensional separation of concerns. In ICSE-AOP00 [330].
- [134] Mark C. Chu-Carroll. Separation of concerns: An organizational approach. In OOPSLA-AOP00 [487].
- [135] Mark C. Chu-Carroll. Separation of concerns in software configuration management. In ICSE-AOP01 [331].
- [136] Mark C. Chu-Carroll. Separation of concerns in software configuration management. In ECOOP-AOP01 [216].
- [137] Mark C. Chu-Carroll. Supporting aspects in program storage. In OOPSLA-AOP02 [489].
- [138] Mark C. Chu-Carroll, James Wright, and Annie T. T. Ying. Visual separation of concerns through multidimensional program storage. In Akşit [21].
- [139] Siobhán Clarke. Composing design models: An extension to the UML. In *Proc. Third Int'l Conf. the Unified Modeling Language (UML)*, LNCS 1939, pages 338–352. Springer-Verlag, October 2000.
- [140] Siobhán Clarke. Designing reusable patterns of cross-cutting behaviour with composition patterns. In OOPSLA-AOP00 [487].
- [141] Siobhán Clarke. Extending UML metamodel for design composition. In ICSE-AOP00 [330].
- [142] Siobhán Clarke. *Composition of Object-Oriented Software Design Models*. PhD thesis, Dublin City University, January 2001.
- [143] Siobhán Clarke. Extending standard UML with model composition semantics. *Science of Computer Programming*, to appear.
- [144] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Designing for evolution with subjects. In *Workshop on Software Change and Evolution, ICSE, 1999*.
- [145] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. The dimensions of separating requirements concerns for the

- duration of the development lifecycle. In OOPSLA-AOP99 [490].
- [146] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Separating concerns throughout the development lifecycle. In ECOOP-AOP99 [219].
 - [147] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Subject-oriented design: Towards improved alignment of requirements, design and code. In *Proc. Object-Oriented Programming, Systems, Languages and Applications (OOPSLA)*, pages 325–339. November 1999.
 - [148] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Subject-oriented design: Support for evolution from the design stage. In *Workshop on Software and Organisation Co-Evolution*, 1999.
 - [149] Siobhán Clarke, William Harrison, Harold Ossher, and Peri Tarr. Subject-oriented design: Towards improved alignment of requirements, design and code. Research Report RC 21300, IBM, April 1999.
 - [150] Siobhán Clarke and John Murphy. Developing a tool to support composition of the components in a large-scale development. In *OOPSLA Workshop on Object-Oriented Behavioural Semantics*, 1997.
 - [151] Siobhán Clarke and John Murphy. Developing a tool to support the application of aspect-oriented programming principles to the design phase. In ICSE-AOP98 [332].
 - [152] Siobhán Clarke and John Murphy. Verifying components under development at the design stage: A tool to support the composition of component design models. In *ICSE Workshop on Component-Based Software Engineering*, 1998.
 - [153] Siobhán Clarke, John Murphy, and Mark Roantree. Composition of UML design models: A tool to support the resolution of conflicts. In *Proc. Object Oriented Information Systems (OOIS)*, 1998.
 - [154] Siobhán Clarke and Robert Walker. Towards a standard design language for AOSD. In Kiczales [368], pages 113–119.
 - [155] Siobhán Clarke and Robert J. Walker. Composition patterns: An approach to designing reusable aspects. In *Proc. 23rd Int'l Conf. Software Engineering (ICSE)*, pages 5–14, May 2001.
 - [156] Siobhán Clarke and Robert J. Walker. Mapping composition patterns to AspectJ and Hyper/J. In ECOOP-AOP01 [216].
 - [157] Siobhán Clarke and Robert J. Walker. Mapping composition patterns to AspectJ and Hyper/J. In ICSE-AOP01 [331].
 - [158] Siobhán Clarke and Robert J Walker. Separating crosscutting concerns across the lifecycle: From composition patterns to AspectJ and Hyper/J. Technical Report TCD-CS-2001-15. Trinity College, Dublin, May 2001.
 - [159] Curtis Clifton and Gary T. Leavens. Observers and assistants: A proposal for modular aspect-oriented reasoning. In AOSD-FOAL02 [42], pages 33–44.
 - [160] Yvonne Coady, Alex Brodsky, Dima Brodsky, Jody Pomkoski, Stephan Gudmundson, Joon Suan Ong, and Gregor Kiczales. Can AOP support extensibility in client-server architectures? In ECOOP-AOP01 [216].
 - [161] Yvonne Coady and Gregor Kiczales. Back to the future: A retroactive study of aspect evolution in operating system code. In Akşit [21].
 - [162] Yvonne Coady, Gregor Kiczales, and Michael Feeley. Exploring an aspect-oriented approach to operating system code. In OOPSLA-AOP00 [487].
 - [163] Yvonne Coady, Gregor Kiczales, Mike Feeley, Norm Hutchinson, and Joon Suan Ong. Structuring operating system aspects: Using AOP to improve OS structure modularity. *Comm. ACM*, 44(10):79–82, October 2001.
 - [164] Yvonne Coady, Gregor Kiczales, Mike Feeley, Norm Hutchinson, and Joon Suan Ong. Structuring system aspects. In ICSE-AOP01 [331].
 - [165] Yvonne Coady, Gregor Kiczales, Mike Feeley, and Greg Smolyn. Using aspects to improve the modularity of path-specific customization in operating system code. In *Proceedings of the 8th European Software Engineering Conference held jointly with 9th ACM SIGSOFT*

- Symposium on Foundations of Software Engineering*, pages 88–98. ACM Press, 2001.
- [166] Geoff A. Cohen. Recombing concerns: Experience with transformation. In *OOPSLA-AOP99* [490].
 - [167] Geoff A. Cohen. A taxonomy of transformation. In *OOPSLA-AOP00* [487].
 - [168] T. Colcombet and P. Fradet. Enforcing trace properties by program transformation. In *Proc. 27th ACM Symp. on Principles of Programming Languages*, pages 54–66, January 2000.
 - [169] C. Constantinides and T. Skotiniotis. Reasoning about a classification of cross-cutting concerns in object-oriented systems. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
 - [170] Constantinos Constantinides, Atef Bader, and Tzilla Elrad. An aspect-oriented design framework for concurrent systems. In *ECOOP-AOP99* [219].
 - [171] Constantinos A. Constantinides, Atef Bader, and Tzilla Elrad. A framework to address a two-dimensional composition of concerns. In *OOPSLA-AOP99* [490].
 - [172] Constantinos A. Constantinides, Atef Bader, and Tzilla Elrad. Separation of concerns in concurrent software systems. In *ECOOP-AOP00* [215].
 - [173] Constantinos A. Constantinides, Atef Bader, Tzilla H. Elrad, P. Netinant, and Mohamed E. Fayad. Designing an aspect-oriented framework in an object-oriented environment. *ACM Computing Surveys*, 32(1es):41, 2000.
 - [174] Constantinos A. Constantinides and Tzilla Elrad. On the requirements for concurrent software architectures to support advanced separation of concerns. In *OOPSLA-AOP00* [487].
 - [175] Constantinos A. Constantinides and Tzilla Elrad. Towards a two-dimensional separation of concerns (poster session). In *Addendum to the 2000 proceedings of the conference on Object-oriented programming, systems, languages, and applications (Addendum)*, pages 63–64. ACM Press, 2000.
 - [176] Constantinos A. Constantinides and Tzilla Elrad. Composing concerns with a framework approach. In Choukair [132], pages 133–140.
 - [177] Constantinos A. Constantinides, Tzilla Elrad, and Mohamed Fayad. Extending the object model to provide explicit support for crosscutting concerns. *Software Practice and Experience*, 32(7):703–734, May 2002.
 - [178] Constantinos A. Constantinides, Therapon Skotiniotis, and Tzilla Elrad. Providing dynamic adaptability in an aspect-oriented framework. In *ECOOP-AOP01* [216].
 - [179] Pascal Costanza. Separation of object identity concerns. In *ECOOP-AOP00* [215].
 - [180] Pascal Costanza. Vanishing aspects. In *OOPSLA-AOP00* [487].
 - [181] Pascal Costanza, Günter Kiesel, and Michael Austermann. Independent extensibility for aspect-oriented systems. In *ECOOP-AOP01* [216].
 - [182] Pascal Costanza, Günter Kiesel, Katharina Mehner, Elke Pulvermüller, and Andreas Speck, editors. *Second Workshop on Aspect-Oriented Software Development of the German Information Society*. Institut für Informatik III, Universität Bonn, February 2002. Technical report IAI-TR-2002-1, ISSN 0944-8535.
 - [183] Krzysztof Czarnecki and Ulrich W. Eisenecker. *Generative Programming: Methods, Tools, and Applications*. Addison-Wesley, Boston, 2000.
 - [184] Krzysztof Czarnecki and Ulrich W. Eisenecker. Separating the configuration aspect to support architecture evolution. In *ECOOP-AOP00* [215].
 - [185] Krzysztof Czarnecki, Ulrich W. Eisenecker, and Patrick Steyaert. Beyond objects: Generative programming. In *ECOOP-AOP97* [217].
 - [186] Dangeti, Thirunavukkarasu, and Jeyabal. Runtime weaving of aspects using dynamic code instrumentation technique for building adaptive software systems. In *AOSD-PAT02* [43].
 - [187] Pierre-Charles David, Thomas Ledoux, and Noury M. N. Bouraqadi-Saâdani. Two-step weaving with reflection using AspectJ. In *OOPSLA-AOP01* [488].

- [188] Brian de Alwis, Stephan Gudmundson, Greg Smolyn, and Gregor Kiczales. Coding issues in AspectJ. In OOPSLA-AOP00 [487].
- [189] A. L. de Moura, C. Ururahy, R. Cerque, and N. Rodriguez. Dynamic support for distributed auto-adaptive applications. In Aksit and Choukair [22].
- [190] K. De Volder, J. Brichau, K. Mens, and T. D'Hondt. Logic meta-programming, a framework for domain-specific aspect programming languages. <http://www.cs.ubc.ca/kdevolder/binaries/cacm-aop-paper.pdf>.
- [191] Kris De Volder. Aspect-oriented logic meta programming. In ECOOP-AOP98 [218].
- [192] Kris De Volder. Inheritance with destructive mixins for better separation of concerns. In OOPSLA-AOP00 [487].
- [193] Kris De Volder. Code reuse, an essential concern in the design of aspect languages. In ECOOP-AOP01 [216].
- [194] Kris De Volder, Tom Touw, and Johan Brichau. Logic meta programming as a tool for separation of concerns. In ECOOP-AOP00 [215].
- [195] B. De Win, B. Vanhaute, and B. De Decker. Security through aspect-oriented programming. In B. De Decker, F. Pressens, J. Smits, and F. Van Herreweghen, editors, *Advances in Network and Distributed Systems Security*, volume 206 of *IFIP Conf. Proc.*, pages 125–138. Kluwer Academic Publishers, 2001.
- [196] Bart De Win, Bart Vanhaute, and Bart De Decker. Towards an open weaving process. In OOPSLA-AOP01 [488].
- [197] Douglas R. Dechow. Exploiting the possibilities of “weave-time” aspects in the creation of component-based ecological models. In AOSD-PAT02 [43].
- [198] John Dempsey and Vinny Cahill. Aspects of system support for distributed computing. In ECOOP-AOP97 [217].
- [199] Morgan Deters and Ron K. Cytron. Introduction of program instrumentation using aspects. In OOPSLA-AOP01 [488].
- [200] Morgan Deters, Nick Leidenfrost, and Ron K. Cytron. Translation of Java to real-time Java using aspects. In Rashid [552].
- [201] Maja D'Hondt and Theo D'Hondt. Is domain knowledge an aspect? In ECOOP-AOP99 [219].
- [202] Jorge L. Diaz-Herrera, Jasmin Chadha, and Neil Pittsley. Aspect-oriented UML modeling for developing embedded systems product lines. In AOSD-UML02 [45].
- [203] Edsger W. Dijkstra. *A discipline of programming*. Prentice-Hall, Englewood Cliffs, New Jersey, 1976.
- [204] A. Dingwal-Smith and A. Finkelstein. From requirements to monitors by way of aspects. In AOSD-EA02 [41].
- [205] Lutz Dominick. Aspect of lifecycle control in a C++ framework. In ECOOP-AOP99 [219].
- [206] Lutz Dominick. Instrumentation aspects require symmetric join points. In ECOOP-AOP00 [215].
- [207] Lutz Dominick and Klaus Ostermann. Supporting extension of components with new paradigms. In OOPSLA-AOP00 [487].
- [208] Rémi Douence and Narendra Jussien. Non-intrusive constraint solver enhancements. In AOSD-PAT02 [43].
- [209] Rémi Douence, Olivier Motelet, and Mario Südholt. A formal definition of crosscuts. In Yonezawa and Matsuoka [684], pages 170–186.
- [210] Rémi Douence, Olivier Motelet, and Mario Südholt. Sophisticated crosscuts for e-commerce. In ECOOP-AOP01 [216].
- [211] Jim Dowling and Vinny Cahill. The k-component architecture meta-model for self-adaptive software. In Yonezawa and Matsuoka [684], pages 81–88.
- [212] Desmond D'Souza, Aamod Sane, and Alan Birchenough. First-class extensibility for UML—Packaging of profiles, stereotypes, patterns. In OOPSLA-AOP99 [490].
- [213] Frederic Duclos, Jacky Estublier, and Philippe Morat. Describing and using non functional aspects in component based applications. In Kiczales [368], pages 65–75.

- [214] Dominic Duggan. A mixin-based, semantics-based approach to reusing domain-specific programming languages. In Bertino [85], pages 179–200.
- [215] *Workshop on Aspects and Dimensions of Concerns (ECOOP 2000)*, June 2000.
- [216] *Workshop on Advanced Separation of Concerns (ECOOP 2001)*, June 2001.
- [217] *Workshop on Aspect Oriented Programming (ECOOP 1997)*, June 1997.
- [218] *Workshop on Aspect Oriented Programming (ECOOP 1998)*, June 1998.
- [219] *Int'l Workshop on Aspect-Oriented Programming (ECOOP 1999)*, June 1999.
- [220] Eric Eide, Alastair Reid, Matthew Flatt, and Jay Lepreau. Aspect weaving as component knitting: Separating concerns with knit. In ICSE-AOP01 [331].
- [221] Tzilla Elrad, Mehmet Aksit, Gregor Kiczales, Karl Lieberherr, and Harold Ossher. Discussing aspects of AOP. *Comm. ACM*, 44(10):33–38, October 2001.
- [222] Tzilla Elrad, Omar Aldawud, and Atef Bader. Aspect-oriented modeling: Bridging the gap between implementation and design. In *ACM SIGPLAN/SIGSOFT Conference on Generative Programming and Component Engineering (GPCE'02)*, October 2002.
- [223] Tzilla Elrad, Robert E. Filman, and Atef Bader. Aspect-oriented programming. *Comm. ACM*, 44(10):29–32, October 2001.
- [224] Erik Ernst. Separation of concerns and then what. In ECOOP-AOP00 [215].
- [225] Erik Ernst. Syntax based modularization: Invasive or not? In OOPSLA-AOP00 [487].
- [226] Erik Ernst. Loosely coupled class families. In ECOOP-AOP01 [216].
- [227] Erik Ernst and David H. Lorenz. Aspects and polymorphism in AspectJ. In Aksit [21].
- [228] J. Fabry. Replication as an aspect. In ECOOP-AOP98 [218].
- [229] Johan Fabry, Johan Brichau, and Tom Mens. Moving code. In ECOOP-AOP01 [216].
- [230] R. E. Filman, S. Barrett, D. D. Lee, and T. Linden. Inserting ilities by controlling communications. *Comm. ACM*, 45(1):116–122, January 2002.
- [231] R. E. Filman and D. P. Friedman. Aspect-oriented programming is quantification and obliviousness. In OOPSLA-AOP00 [487].
- [232] R.E. Filman. What is aspect-oriented programming, revisited. In ECOOP-AOP01 [216].
- [233] Robert E. Filman. Retrofitting objects. In *ACM Conf. Object Oriented Programming Systems, Languages, and Applications (OOPSLA-87)*, pages 342–353, October 1987.
- [234] Robert E. Filman. Achieving ilities. In Linden and Thompson [411].
- [235] Robert E. Filman. Injecting ilities. In ICSE-AOP98 [332].
- [236] Robert E. Filman. Managing ilities. In *Component-Based Software Engineering Workshop (ICSE)*, pages 81–85, April 1998.
- [237] Robert E. Filman. Applying aspect-oriented programming to intelligent synthesis. In ECOOP-AOP00 [215].
- [238] Robert E. Filman. A software architecture for intelligent synthesis environments. In *Proc. 2001 IEEE Aerospace Conference*, pages 2879–2888, March 2001.
- [239] Robert E. Filman. A bibliography of aspect-oriented programming, version 1.1. Technical Report 02.06, Research Institute for Advanced Computer Science, NASA Ames Research Center, Moffett Field, California, August 2002.
- [240] Robert E. Filman and Klaus Havelund. Realising aspects by transforming for events. In Kris De Volder, Kim Mens, Tom Mens, and Roel Wuyts, editors, *Proc. Workshop on Declarative Meta Programming to Support Software Development*, September 2002.
- [241] Robert E. Filman and Klaus Havelund. Source-code instrumentation and quantification of events. In AOSD-FOAL02 [42], pages 45–49.
- [242] Robert E. Filman, David J. Kormsmeier, and Diana D. Lee. A CORBA extension for intelligent software environments. *Advances in Engineering Software*, 31(8-9):727–732, 2000.

- [243] Robert E. Filman and Diana D. Lee. Redirecting by injector. In Choukair [132], pages 141–146.
- [244] Daniela Florescu, Andreas Grünhagen, and Donald Kossman. XL: An XML programming language for web service specification and composition. In *Proc. The Eleventh Int'l World Wide Web Conference*, pages 65–76. May 2002.
- [245] Marcus Fontura. Dimension templates: Multi-dimensional separation of concerns in UML. In OOPSLA-AOP99 [490].
- [246] Ira R. Forman. Superimposition: A form of separation of concerns for distributed systems. In OOPSLA-AOP00 [487].
- [247] P. Fradet and M. Südholt. AOP: Towards a generic framework using program transformation and analysis. In ECOOP-AOP98 [218].
- [248] P. Fradet and M. Südholt. An aspect language for robust programming. In ECOOP-AOP99 [219].
- [249] Stephen T. Frezza. The ubiquitous overlapping, dynamic concerns project vs. product. In ICSE-AOP01 [331].
- [250] A. Furfaro, L. Nigro, and F. Pupo. Aspect oriented programming using actors. In Aksit and Choukair [22].
- [251] Critina Gacek and Michalis Anastasopoulos. Implementing product line variabilities. In *Proceedings of 2001 Symposium on Software Reusability: Putting Software Reuse in Context*, pages 109–117. ACM Press, 2001.
- [252] Patrice Gahide, Noury Bouraqadi, and Laurence Duchien. Promoting component reuse by integrating aspects and contracts in an architecture model. In AOSD-PAT02 [43].
- [253] Andreas Gal, Wolfgang Schroeder-Preikschat, and Olaf Spinczyk. AspectC++: Language proposal and prototype implementation. In OOPSLA-AOP01 [488].
- [254] Andreas Gal and Olaf Spinczyk. Build management for AspectC++. In OOPSLA-AOP02 [489].
- [255] Alessandro Garcia, Christina Chavez, Otavio Silva, Viviane Silva, and Carlos Lucena. Promoting advanced separation of concerns in intra-agent and inter-agent software engineering. In OOPSLA-AOP01 [488].
- [256] Alessandro F. Garcia and Carlos J.P. de Lucena. An aspect-based object-oriented model for multi-agent systems. In ICSE-AOP01 [331].
- [257] Naghmeh Ghafari, Alexander Lau, Barry Pekilis, James Thai, and Rudolph Seviora. H&V consistency checking for software health monitoring. In AOSD-PAT02 [43].
- [258] Holger Giese. Towards ruling component-based distributed systems with role-based modeling and cross-cutting aspects. In ICSE-AOP01 [331].
- [259] Holger Giese and Alexander Vilbig. Towards aspect-oriented design and architecture. In OOPSLA-AOP00 [487].
- [260] M. Glandrup. Extending c++ using the concepts of composition filters. Master's thesis, University of Twente, 1995.
- [261] Maurice Glandrup and Arend Rensink. Formal foundations for reasoning about evolution. In OOPSLA-AOP01 [488].
- [262] Kasper B. Graversen and Johannes Beye. Conceptual programming using roles. In AOSD-AOD02 [40].
- [263] Kasper B. Graversen and Kasper Østerbye. Aspect modelling as role modelling. In OOPSLA-AOP02 [489].
- [264] Jeff Gray. Using software component generators to construct a meta-weaver framework. In *Proceedings of the 23rd International Conference on Software Engineering*, pages 789–790. IEEE Computer Society, 2001.
- [265] Jeff Gray. Handling crosscutting constraints in domain-specific modeling. In AOSD-RICX02 [44].
- [266] Jeff Gray, Ted Bapty, and Sandeep Neema. Aspectifying constraints in model-integrated computing. In OOPSLA-AOP00 [487].
- [267] Jeff Gray, Ted Bapty, Sandeep Neema, and James Tuck. Handling crosscutting constraints in domain-specific modeling. *Comm. ACM*, 44(10):87–93, October 2001.
- [268] Danny Greefhorst. Separating concerns in software logistics. In OOPSLA-AOP00 [487].

- [269] Robin Green and Awais Rashid. An aspect-oriented framework for schema evolution in object-oriented databases. In *AOSD-PAT02* [43].
- [270] Michael Grier. Motivation for enabling separation of concerns in software product lines. In *OOPSLA-AOP99* [490].
- [271] Bill Griswold, Yoshikiyo Kato, and Jimmy Yuan. Aspect browser: Tool support for managing dispersed aspects. In *ICSE-AOP00* [330].
- [272] William G. Griswold. Coping with cross-cutting software changes using information transparency. In Yonezawa and Matsuoka [684], pages 250–265.
- [273] William G. Griswold, Yoshikiyo Kato, and Jimmy J. Yuan. Aspect browser: Tool support for managing dispersed aspects. In *OOPSLA-AOP99* [490].
- [274] William G. Griswold, Jimmy J. Yuan, and Yoshikiyo Kato. Exploiting the map metaphor in a tool for software evolution. In *Proceedings of the 23rd international conference on Software engineering*, pages 265–274. IEEE Computer Society, 2001.
- [275] Paul Grunbacher, Alexander Leyed, and Nenad Medvidovic. Dimensions of concerns in requirements negotiation and architecture modeling. In *ICSE-AOP00* [330].
- [276] John Grundy. Aspect-oriented requirements engineering for component-based software systems. In *4th IEEE International Symposium on Requirements Engineering*, pages 84–91. IEEE Computer Society, 1999.
- [277] John Grundy and Guoling Ding. Automatic validation of deployed J2EE components using aspects. In *The 17th IEEE Int'l Conf. Automated Software Engineering*, pages 47–56, September 2002.
- [278] Stephan Gudmundson and Gregor Kiczales. Addressing practical software development issues in AspectJ with a pointcut interface. In *ECOOP-AOP01* [216].
- [279] Stephan Gudmundson and Gregor Kiczales. Data abstraction in AspectJ. In Yonezawa and Matsuoka [684], pages 270–271.
- [280] Rachid Guerraoui. Strategic research directions in object-oriented programming. *ACM Computing Surveys*, 28(4):691–700, December 1996.
- [281] K. Gybels. Using a logic language to express cross-cutting through dynamic joinpoints. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [282] Kris Gybels and Johan Brichau. Arranging language features for pattern-based crosscuts. In Akşit [21].
- [283] Naji Habra. Separation of concerns in software engineering education. In *ICSE-AOP01* [331].
- [284] S. Hanenberg. A proposal for classifying tangled code. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [285] Stefan Hanenberg, Boris Bachmendo, and Rainer Unland. An object model for general-purpose aspect languages. In Bosch [99], pages 80–91.
- [286] Stefan Hanenberg and Pascal Costanza. Connecting aspects in AspectJ: Strategies vs. patterns. In *AOSD-PAT02* [43].
- [287] Stefan Hanenberg and Rainer Unland. Grouping objects using aspect-oriented adapters. In Rashid [552].
- [288] Stefan Hanenberg and Rainer Unland. Using and reusing aspects in AspectJ. In *OOPSLA-AOP01* [488].
- [289] Stefan Hanenberg and Rainer Unland. Roles and aspects: Similarities, differences, and synergetic potential. In *8th International Conference on Object-Oriented Information Systems*, September 2002.
- [290] Stefan Hanenberg and Rainer Unland. Specifying aspect-oriented design constraints in AspectJ. In *OOPSLA-AOP02* [489].
- [291] Stefan Hanenberg and Rainer Unland. Parametric introductions. In Akşit [21].
- [292] Jan Hannemann and Gregor Kiczales. Overcoming the prevalent decomposition in legacy code. In *ICSE-AOP01* [331].

- [293] Jan Hannemann and Gregor Kiczales. Design pattern implementation in java and aspectj. In *Proceedings of the 17th ACM conference on Object-oriented programming, systems, languages, and applications*, pages 161–173. ACM Press, 2002.
- [294] W. H. Harrison, H. Kilov, H. L. Ossher, and I. Simmonds. From dynamic super-types to subjects: A natural way to specify and develop systems. *IBM Systems Journal*, 35(2):244–256, June 1996.
- [295] William Harrison. Composition and multiple-inheritance in OO design (Where in the madness is the method?). In *OOPSLA-AOP01* [488].
- [296] William Harrison, Vincent Kruskal, Harold Ossher, Peri Tarr, and Frank Tip. Common low-level support for composition and weaving. In *OOPSLA-AOP02* [489].
- [297] William Harrison and Harold Ossher. Subject-oriented programming—a critique of pure objects. In *Proc. 1993 Conf. Object-Oriented Programming Systems, Languages, and Applications*, pages 411–428, September 1993.
- [298] William Harrison and Harold Ossher. Member-group relationships among objects. In *AOSD-FOAL02* [42], pages 9–16.
- [299] William Harrison, Harold Ossher, and Peri Tarr. The beginnings of a graphical environment for subject-oriented programming. In *ECOOP-AOP97* [217].
- [300] William Harrison, Harold Ossher, and Peri Tarr. Using delegation for software and subject composition. Technical Report RC 20946, IBM Thomas J. Watson Research Center, August 1997.
- [301] William Harrison, Peri Tarr, and Harold Ossher. A position on considerations in UML design of aspects. In *AOSD-UML02* [45].
- [302] F.J. Hauck, U. Becker, M. Geier, E. Meier, U. Rasthofer, and M. Steckermeier. AspectIX: A middleware for aspect-oriented programming. In *ECOOP-AOP98* [218].
- [303] Juan Hernandez, Michael Papathomas, Huan M. Murillo, and Fernando Sánchez. Coordinating concurrent objects: How to deal with the coordination aspect? In *ECOOP-AOP97* [217].
- [304] José Luis Herrero, Fernando Sánchez, Fabiola Lucio, and Miguel Toro. Introducing separation of aspects at design time. In *ECOOP-AOP00* [215].
- [305] José Luis Herrero, Fernando Sánchez, and Miguel Toro. Fault tolerance AOP approach. In Rashid [552].
- [306] Stephan Herrmann. Dynamic view connectors for separating concerns in software engineering environments. In *ICSE-AOP00* [330].
- [307] Stephan Herrmann. Composable designs with UFA. In *AOSD-UML02* [45].
- [308] Stephan Herrmann. Object teams: Improving modularity for crosscutting collaborations. In Akşit and Mezini [23].
- [309] Stephan Herrmann and Mira Mezini. On the need for a unified MDSOC model: Experiences from constructing a modular software engineering environment. In *OOPSLA-AOP00* [487].
- [310] Stephan Herrmann and Mira Mezini. PIROL: A case study for multidimensional separation of concerns in software engineering environments. In *OOPSLA*, pages 188–207, 2000.
- [311] Stephan Herrmann and Mira Mezini. Combining composition styles in the evolvable language LAC. In *ICSE-AOP01* [331].
- [312] Dirk Heuzeroth, Welf Löwe, Andreas Ludwig, and Uwe Assmann. Aspect-oriented configuration and adaptation of component communication. In Bosch [99], pages 58–69.
- [313] Rich Hilliard. Aspects, concerns, subjects, views, In *OOPSLA-AOP99* [490].
- [314] R. Hirschfeld. Advice activation in aspects. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [315] Robert Hirschfeld. Aspects - AOP with squeak. In *OOPSLA-AOP01* [488].
- [316] Robert Hirschfeld. Aspect-oriented programming with aspects. In Akşit and Mezini [23].
- [317] Robert Hirschfeld and Matthias Wagner. Metalevel tool support in AspectS. In *OOPSLA-AOP02* [489].

- [318] Wai Ming Ho, Jean-Marc Jézéquel, Francois Pennaneach, and Noël Plouzeau. A toolkit for weaving aspect oriented UML designs. In Kiczales [368], pages 99–105.
- [319] Wai-Ming Ho, Francois Pennaneach, Jean-Marc Jézéquel, and Noël Plouzeau. Aspect-oriented design with the UML. In ICSE-AOP00 [330].
- [320] Ian M. Holland. Specifying reusable components using contracts. In *European Conf. on Object-Oriented Programming*, pages 287–308, Utrecht, Netherlands, 1992. Springer Verlag Lecture Notes 615.
- [321] Ian M. Holland. *The Design and Representation of Object-Oriented Components*. PhD thesis, Northeastern University, 1993.
- [322] D. Holmes, J. Noble, and J. Potter. Towards reusable synchronisation for object-oriented. In ECOOP-AOP98 [218].
- [323] David Holmes, James Noble, and John Potter. Aspects of synchronization. In ECOOP-AOP97 [217].
- [324] Pavel Hruby. Dimensions for the separation of concerns in describing software development processes. In OOPSLA-AOP99 [490].
- [325] Jie Huang. Experience using AspectJ to implementation cord. In OOPSLA-AOP00 [487].
- [326] Frank Hunleth, Ron Cytron, and Christopher Gill. Building customizable middleware using aspect oriented programming. In OOPSLA-AOP01 [488].
- [327] Frank Hunleth and Ron K. Cytron. Footprint and feature management using aspect-oriented programming techniques. In *Proceedings of the joint conference on Languages, compilers and tools for embedded systems*, pages 38–45. ACM Press, 2002.
- [328] Walter L. Hürsch and Cristina Videira Lopes. Separation of concerns. Technical Report NU-CCS-95-03, College of Computer Science, Northeastern University, Boston, MA, February 1995.
- [329] Yuuji Ichisugi and Akira Tanaka. Difference-based modules: A class-independent module mechanism. In Magnusson [427], pages 62–88.
- [330] *Workshop on Multi-Dimensional Separation of Concerns in Software Engineering (ICSE 2000)*, June 2000.
- [331] *Workshop on Advanced Separation of Concerns in Software Engineering (ICSE 2001)*, May 2001.
- [332] *Int'l Workshop on Aspect Oriented Programming (ICSE 1998)*, April 1998.
- [333] John Irwin, Jean-Marc Loingtier, John R. Gilbert, Gregor Kiczales, John Lamping, Anurag Mendhekar, and Tatiana Shpeisman. Aspect-oriented programming of sparse matrix code. In *Int'l Scientific Computing in Object-Oriented Parallel Environments (ISCOPE)*, volume 1343 of LNCS. Springer-Verlag, 1997.
- [334] H.-Arno Jacobsen. Middleware architecture design based on aspects, the open implementation metaphor and modularity. In Rashid [552].
- [335] Doug Janzen and Kris De Volder. Navigating and querying code without getting lost. In Akşit [21].
- [336] Jean-Marc Jézéquel, Noël Plouzeau, Torben Weis, and Kurt Geihs. From contracts to aspects in UML designs. In AOSD-UML02 [45].
- [337] Bo Norregaard Jørgensen, Eddy Truyen, Frank Matthijs, and Wouter Joosen. Customization of object request brokers by application specific policies. In *Proc. Middleware '2000*, April 2000.
- [338] R. K. Joshi and N. Agrawal. AspectJ implementation of dynamically pluggable filter objects in distributed environment. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [339] Matthias Jung and Ernst W. Biersack. How layering protocol software violates separation of concerns. In ECOOP-AOP00 [215].
- [340] Piotr Kaminski. Applying multi-dimensional separation of concerns to software visualization. In ICSE-AOP01 [331].
- [341] Toshihiro Kamiya. Soma: a paradigm to evolve software based on separation of concerns. In *Proceedings of the Workshop on Principles of Software Evolution*, pages 124–128. ACM Press, 2002.

- [342] Mohamed Kandé, Omar Aldawud, Grady Booch, and Bill Harrison, editors. *Second International Workshop on Aspect-Oriented Modeling with UML (ijUML022002)*, September 2002.
- [343] Mohamed Mancona Kandé, Jörg Kienzle, and Alfred Strohmeier. From AOP to UML—A bottom-up approach. In AOSD-UML02 [45].
- [344] Mohamed Mancona Kandé and Alfred Strohmeier. On the role of multi-dimensional separation of concerns in software architecture. In OOPSLA-AOP00 [487].
- [345] Mohamed Mancona Kandé and Alfred Strohmeier. Modeling crosscutting concerns using software connectors. In OOPSLA-AOP01 [488].
- [346] Matthew Kaplan. Dynamic selection: The discriminating developers way to compose. In OOPSLA-AOP00 [487].
- [347] Matthew Kaplan, Harold Ossher, William Harrison, and Vincent Kruskal. Subject-oriented design and the Watson subject compiler. In *Proc. OOPSLA'96 Workshop on Subjectivity*, October 1996.
- [348] E. P. Kasten, P. K. McKinley, S. M. Sadjadi, and R. E. K. Stirewalt. Separating introspection and intercession to support metamorphic distributed systems. In Akşit and Choukair [22].
- [349] Mika Katara. Superposing UML class diagram. In AOSD-UML02 [45].
- [350] Mika Katara and Shmuel Katz. Architectural views of aspects. In Akşit [21].
- [351] Mika Katara and Tommi Mikkonen. Refinements and aspects in uml. In Kandé et al. [342].
- [352] Shmuel Katz and Yossi Gil. Aspects and superimpositions. In ECOOP-AOP99 [219].
- [353] P. Kellomaeki. Formal aspects for distributed systems. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [354] P. Kellomaki. Composing distributed systems from reusable aspects of behaviour. In Akşit and Choukair [22].
- [355] Pertti Kellomäki. A formal basis for aspect-oriented specification with superposition. In AOSD-FOAL02 [42], pages 27–32.
- [356] Pertti Kellomäki and Tommi Mikkonen. Separating product variance and domain concepts in the specification of software product lines. In ECOOP-AOP00 [215].
- [357] Elizabeth A. Kendall. Agent roles and aspects. In ECOOP-AOP98 [218].
- [358] Elizabeth A. Kendall. Aspect-oriented programming for role models. In ECOOP-AOP99 [219].
- [359] Elizabeth A. Kendall. Role model designs and implementations with aspect-oriented programming. In *Proceedings of the 1999 ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications*, pages 353–369. ACM Press, 1999.
- [360] Liz Kendall. Reengineering for separation of concerns. In ICSE-AOP00 [330].
- [361] P. Kenens, S. Michiels, F. Matthijs, B. Robben, E. Truyen, B. Vanhaute, W. Joosen, and P. Verbaeten. An AOP case with static and dynamic aspects. In ECOOP-AOP98 [218].
- [362] Mik Kersten. AO tools: State of the (AspectJ) art and open problems. In OOPSLA-AOP02 [489].
- [363] Mik A. Kersten and Gail C. Murphy. Atlas: A case study in building a web-based learning environment using aspect-oriented programming. In *Proc. ACM Conf. Object-oriented Programming, Systems, Languages, and Applications*, pages 340–352. ACM, 1999.
- [364] Emre Kiciman and Armando Fox. Separation of concerns in networked service composition. In ICSE-AOP01 [331].
- [365] G. Kiczales. Aspect-oriented programming. *ACM Computing Surveys*, 28(4es):154, 1996.
- [366] G. Kiczales, E. Hilsdale, J. Hugunin, M. Kersten, J. Palm, and W. G. Griswold. Getting started with AspectJ. *Comm. ACM*, 44(10):59–65, October 2001.
- [367] G. Kiczales, E. Hilsdale, J. Hugunin, M. Kersten, J. Palm, and W. G. Griswold. An overview of AspectJ. In J. L. Knudsen, editor, *Proc. ECOOP 2001, LNCS 2072*, pages 327–353, Berlin, June 2001. Springer-Verlag.

- [368] Gregor Kiczales, editor. *Proc. 1st Int' Conf. on Aspect-Oriented Software Development (AOSD-2002)*. ACM Press, April 2002.
- [369] Gregor Kiczales and Erik Hilsdale. Aspect-oriented programming. In *Proceedings of the 8th European Software Engineering Conference held jointly with 9th Acm Sigsoft Symposium on Foundations of Software Engineering*, page 313. ACM Press, 2001.
- [370] Gregor Kiczales, Jim Hugunin, Mik Kersten, John Lamping, Cristina Lopes, and William G. Griswold. Semantics-based cross-cutting in AspectJ. In ICSE-AOP00 [330].
- [371] Gregor Kiczales, John Lamping, Anurag Mendhekar, Chris Maeda, Cristina Lopes, Jean-Marc Loingtier, and John Irwin. Aspect-oriented programming. In Mehmet Akşit and Satoshi Matsuoka, editors, *11th European Conf. Object-Oriented Programming*, volume 1241 of *LNCS*, pages 220–242. Springer Verlag, 1997.
- [372] Jörg Kienzle and Rachid Guerraoui. Aspect oriented software development AOP: Does it make sense? The case of concurrency and failures. In Magnusson [427], pages 37–61.
- [373] Howard Kim and Siobhán Clarke. The relevance of AOP to an applications programmer in an EJB environment. In AOSD-PAT02 [43].
- [374] Doug Kimmelman. Multidimensional tree-structured spaces for separation of concerns in software development environments. In OOPSLA-AOP99 [490].
- [375] Tomoij Kishi and Natsuko Noda. Aspect-oriented analysis for product line architecture. In OOPSLA-AOP00 [487].
- [376] Tomoji Kishi and Natsuko Noda. Analyzing concerns used in analysis/design techniques. In ICSE-AOP01 [331].
- [377] Günter Kniesel, Pascal Costanza, and Michael Austermann. JMangler—a framework for load-time transformation of Java class files. In *First IEEE Int'l Workshop on Source Code Analysis and Manipulation (SCAM 2001)*, November 2001.
- [378] Jorgen Knudsen. Aspect-oriented programming in BETA using the fragment system. In ECOOP-AOP99 [219].
- [379] P. Koopmans. On the design and realization of the sina compiler. Master's thesis, University of Twente, 1995.
- [380] P. Koopmans. Sina user's guide and reference manual. Technical report, Dept. of Computer Science, University of Twente, 1995.
- [381] Vincent Kruskal. A blast from the past: Using P-EDIT for multidimensional editing. In ICSE-AOP00 [330].
- [382] Uirá Kulesza and Dilma M. Silva. Reengineering of the JAWS web server design using aspect-oriented programming. In ECOOP-AOP00 [215].
- [383] Mario Kupries and Erika Horn. An architecture-based approach substantiating the aspect of interagent connection in platforms. In Choukair [132], pages 127–132.
- [384] Ivan Kurtev. Transformation of XML concerns into applications using AOP-techniques. In AOSD-RICX02 [44].
- [385] Robert Laddaga, Paul Robertson, and Howie Shrobe. Aspects of the real-world. In OOPSLA-AOP01 [488].
- [386] Ralf Laemmel, Eelco Visser, and Joost Visser. Strategic programming meets adaptive programming. In Akşit [21].
- [387] S. Laemmermann and E. Tyugu. A specification logic for dynamic composition of services. In Choukair [132], pages 157–162.
- [388] Donal Lafferty and Vinny Cahill. Real world evaluation of Aspect-Oriented Programming with Iguana. In ECOOP-AOP00 [215].
- [389] Albert Lai and Gail C. Murphy. The structure of features in Java code: An exploratory investigation. In OOPSLA-AOP99 [490].
- [390] Albert Lai and Gail C. Murphy. Capturing concerns with conceptual modules. In ICSE-AOP01 [331].
- [391] Albert Lai, Gail C. Murphy, and Robert J. Walker. Separating concerns with HyperJ: An experience report. In ICSE-AOP00 [330].
- [392] Ralf Lämmel. Declarative aspect-oriented programming. In *ACM SIGPLAN Workshop on Partial Evaluation and Semantics-Based Program Manipulation (PEPM 99)*, 1999.

- [393] Ralf Lämmel. A semantical approach to method-call interception. In Kiczales [368], pages 41–55.
- [394] Ralf Lämmel, Günter Riedewald, and Wolfgang Lohmann. Adaptation of functional object programs. In ECOOP-AOP99 [219].
- [395] John Lamping. The interaction of components and aspects. In ECOOP-AOP97 [217].
- [396] John Lamping. The role of base in aspect-oriented programming. In ECOOP-AOP99 [219].
- [397] John Lamping. The role of the base in aspect-oriented programming. In OOPSLA-AOP99 [490].
- [398] Diana Lee and Robert Filman. Verification of compositional software architectures. In Linden and Thompson [411].
- [399] Harry C. Li, Shriram Krishnamurthi, and Kathi Fisler. Interfaces for modular feature verification. In *Proc. 17th IEEE Int'l Conf. on Automated Software Engineering*, pages 195–204, September 2002.
- [400] Karl Lieberherr, David Lorenz, and Mira Mezini. Programming with Aspectual Components. Technical Report NU-CCS-99-01. College of Computer Science, Northeastern University, Boston, MA, March 1999.
- [401] Karl Lieberherr, David H. Lorenz, and Pengcheng Wu. A case for statically executable advice: Checking the law of demeter with AspectJ. In Akşit [21].
- [402] Karl Lieberherr, Doug Orleans, and Johan Ovlinger. Aspect-oriented programming with adaptive methods. *Comm. ACM*, 44(10):39–41, October 2001.
- [403] Karl J. Lieberherr. Object-oriented programming with class dictionaries. *Journal on Lisp and Symbolic Computation*, 1(2):185–212, 1988.
- [404] Karl J. Lieberherr. Component enhancement: An adaptive reusability mechanism for groups of collaborating classes. In J. van Leeuwen, editor, *Information Processing '92, 12th World Computer Congress*, pages 179–185, Madrid, Spain, 1992. Elsevier.
- [405] Karl J. Lieberherr. *Adaptive Object-Oriented Software: the Demeter Method with Propagation Patterns*. PWS Publishing Company, Boston, 1996.
- [406] Karl J. Lieberherr and Ian Holland. Assuring good style for object-oriented programs. *IEEE Software*, pages 38–48, September 1989.
- [407] Karl J. Lieberherr, Walter Hürsch, Ignacio Silva-Lepe, and Cun Xiao. Experience with a graph-based propagation pattern programming tool. In Gene Forte and Nazim Madhavji, editors, *Int'l Workshop on CASE*, pages 114–119, Montréal, Canada, 1992. IEEE Computer Society.
- [408] Karl J. Lieberherr and Doug Orleans. Preventive program maintenance in Demeter/Java (research demonstration). In *Int'l Conf. Software Engineering*, pages 604–605, Boston, MA, 1997. ACM Press.
- [409] Karl J. Lieberherr, Ignacio Silva-Lepe, and Cun Xiao. Adaptive object-oriented programming using graph-based customization. *Comm. ACM*, 37(5):94–101, May 1994.
- [410] Karl J. Lieberherr and Cun Xiao. Object-Oriented Software Evolution. *IEEE Trans. Soft. Eng.*, 19(4):313–343, April 1993.
- [411] Ted Linden and Craig Thompson, editors. *OMG-DARPA Workshop on Compositional Software Architectures*, January 1998.
- [412] Jean Marie Lions, Didier Simoneau, Gilles Pitette, and Imed Moussa. Extending open-tool/uml using metamodeling: An aspect-oriented programming case study. In Kandé et al. [342].
- [413] Martin Lippert and Cristina Videira Lopes. A study on exception detection and handling using aspect-oriented programming. In *Proceedings of the 22nd International Conference on Software Engineering*, pages 418–427. ACM Press, 2000.
- [414] Christina Lopes, Erik Hilsdale, Jim Hugunin, Mik Kersten, and Gregor Kiczales. Illustrations of crosscutting. In ECOOP-AOP00 [215].
- [415] Crista Videira Lopes and Gregor Kiczales. Recent developments in AspectJ. In ECOOP-AOP98 [218].

- [416] Cristina Videira Lopes. Graph-based optimizations for parameter passing in remote invocations. In Luis-Felipe Cabrera and Marvin Theimer, editors, *4th Int'l Workshop on Object Orientation in Operating Systems*, pages 179–182, Lund, Sweden, August 1995. IEEE Computer Society Press.
- [417] Cristina Videira Lopes. Adaptive parameter passing. In *2nd Int'l Symposium on Object Technologies for Advanced Software*, pages 118–136, Kanazawa, Japan, March 1996. Springer-Verlag.
- [418] Cristina Videira Lopes. *D: A Language Framework for Distributed Programming*. PhD thesis, College of Computer Science, Northeastern University, 1997.
- [419] Cristina Videira Lopes and Gregor Kiczales. D: A language framework for distributed programming. Technical Report SPL-97-010, Palo Alto Research Center, 1997.
- [420] Cristina Videira Lopes and Karl Lieberherr. AP/S++: Case-study of a MOP for purposes of software evolution. In *Reflection '96*, San Francisco, April 1996.
- [421] Cristina Videira Lopes and Karl J. Lieberherr. Abstracting process-to-function relations in concurrent object-oriented applications. In Tokoro and Pareschi [639], pages 81–99.
- [422] D.H. Lorenz. Visitor beans: An aspect-oriented pattern. In ECOOP-AOP98 [218].
- [423] N. Loughran and A. Rashid. Mining aspects. In AOSD-EA02 [41].
- [424] Neil Loughran and Awais Rashid. Relational database support for aspect-oriented programming. In Akşit and Mezini [23].
- [425] Tina Low. Designing, modelling and implementing a toolkit for aspect-oriented tracing (TAST). In AOSD-UML02 [45].
- [426] C.P. Lunau. Is composition of metaobjects = aspect oriented programming. In ECOOP-AOP98 [218].
- [427] B. Magnusson, editor. *ECOOP 2002—Object-Oriented Programming: 16th European Conference, LNCS 2374*. Springer Verlag, June 2002.
- [428] Tom Mahieu, Bart Vanhaute, Karel De Vlamincx, Gerda Janssens, and Wouter Joosen. Using AOP to build complex data centric component frameworks. In OOPSLA-AOP00 [487].
- [429] Jacques Malenfant, Maria-Teresa Segarra, and Franoise André. Dynamic adaptability: The MoléNE experiment. In Yonezawa and Matsuoka [684], pages 110–117.
- [430] T. Massoni, V. Alves, S. Soares, and P. Borba. Pdc: Persistent data collections pattern. In *First Latin American Conference on Pattern Languages of Programming — SugarLoafPLoP*, October 2001.
- [431] Tiago Massoni, Augusto Sampaio, and Paulo Borba. Progressive implementation of aspects. In OOPSLA-AOP01 [488].
- [432] Hidehiko Masuhara, Gregor Kiczales, and Chris Dutchyn. Compilation semantics of aspect-oriented programs. In AOSD-FOAL02 [42], pages 17–26.
- [433] Frank Matthijs, Wouter Joosen, Bart Vanhaute, Bert Robben, and Pierre Verbaeten. Aspects should not die. In ECOOP-AOP97 [217].
- [434] Sean McDirmid and Wilson C. Hsieh. Aspect-oriented programming with Jiazzi. In Akşit [21].
- [435] David L. McReynolds, Sheryl L. Duggins, Doreen L. Galli, and John H. Mayer. Distributed characteristics of subject oriented programming: An evaluation with the process and object paradigms. In *Proceedings of the 37th Annual Southeast Regional Conference (CD-ROM)*, page 19. ACM Press, 1999.
- [436] Katharina Mehner and Awais Rashid. Towards a standard interface for runtime inspection in aop environments. In OOPSLA-AOP02 [489].
- [437] Katharina Mehner and Annika Wagner. On the role of method families in aspect-oriented programming. In ECOOP-AOP99 [219].
- [438] François Mekerke, Geri Georg, Robert France, and Roger Alexander. Tool support for aspect-oriented design. In J.-M. Bruel and Z. Bellahsene, editors, *Advances in Object-Oriented Information Systems OOIS 2002 Workshops, LNCS 2426*, pages 280–289, September 2002.

- [439] Juri Memmer. Designing with Cosmos. In AOSD-AOD02 [40].
- [440] Juri Memmert. Application development in Java: From OOP to SOP. In ICSE-AOP00 [330].
- [441] Juri Memmert. Separation of concerns at the source. In ICSE-AOP01 [331].
- [442] Anurag Mendhekar, Gregor Kiczales, and John Lamping. RG: A case-study for aspect-oriented programming. Technical Report SPL-97-009, Palo Alto Research Center, 1997.
- [443] K. Mens. Architectural aspects. In AOSD-EA02 [41].
- [444] Kim Mens. Multiple cross-cutting architectural views. In ICSE-AOP00 [330].
- [445] Kim Mens, Tom Mens, and Michel Wermelinger. Supporting software evolution with intentional software views. In *Proceedings of the Workshop on Principles of Software Evolution*, pages 138–142. ACM Press, 2002.
- [446] Tom Mens and Michel Wermelinger. Separation of concerns for software evolution. *Journal of Software Maintenance and Evolution: Research and Practice*, 14(5):311–315, 2002.
- [447] C. Mesquita, S. Barbosa, and C. de Lucena. Towards the identification of concerns in personalization mechanisms via scenarios. In AOSD-EA02 [41].
- [448] Wolfgang De Meuter. Monads as a theoretical foundation for AOP. In ECOOP-AOP97 [217].
- [449] Mira Mezini. *Variation-Oriented Programming Beyond Classes and Inheritance*. PhD thesis, University of Siegen, 1997.
- [450] Mira Mezini and Karl Lieberherr. Adaptive plug-and-play components for evolutionary software development. In C. Chambers, editor, *OOPSLA*, pages 97–116. ACM, October 1998.
- [451] Mira Mezini and Klaus Ostermann. Integrating independent components with on-demand remodularization. In *Proceedings of the 17th ACM conference on Object-oriented programming, systems, languages, and applications*, pages 52–67. ACM Press, 2002.
- [452] Mira Mezini, Linda Seiter, and Karl Lieberherr. Component integration with pluggable composite adapters. In Mehmet Akşit, editor, *Symposium on Software Architectures and Component Technology: The State of the Art in Research and Practice*. Kluwer Academic Publishers, October 2001.
- [453] T. Mikkonen. On objects, aspects, and specifications addressing their collaboration. In AOSD-EA02 [41].
- [454] H. Mili, H. Mcheick, and S. Sadou. Distribution and aspects. In Akşit and Choukair [22].
- [455] H. Mili, H. Mcheick, and S. Sadou. Distribution and aspects. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [456] Hafedh Mili, Joumana Dargham, and Salah Bendelloul. Separation of concerns and typing: A first stab. In OOPSLA-AOP99 [490].
- [457] Hafedh Mili, William Harrison, and Harold Ossher. Supporting subject-oriented programming in smalltalk. In *TOOLS USA 96*, August 1996.
- [458] Naftaly Minsky. Law-governed regularities in object systems; part 1: Principles. *Theory and Practice of Object Systems (TOPAS)*, 2(4), 1996.
- [459] Naftaly Minsky and Partha Pal. Law-governed regularities in object systems; part 2: the eiffel case. In *Theory and Practice of Object Systems*, 3(2), 1997.
- [460] Mattia Monga. Concern-specific aspect-oriented programming with Malaj. In ICSE-AOP00 [330].
- [461] Ana Moreira, João Araújo, and Isabel Brito. Crosscutting quality attributes for requirements engineering. In *Proceedings of the 14th International Conference on Software Engineering and Knowledge Engineering*, pages 167–174. ACM Press, 2002.
- [462] M. Mousavi, G. Russello, M. Chaudron, M. A. Reniers, T. Basten, A. Corsaro, S. Shukla, R. Gupta, and D. Schmid. Aspects + GAMMA = AspectGAMMA: A formal framework for aspect-oriented specification. In AOSD-EA02 [41].

- [463] Jurgen K. Muller. Aspect-design in the building-block method. In ECOOP-AOP97 [217].
- [464] Gail C. Murphy, Albert Lai, Robert J. Walker, and Martin P. Robillard. Separating features in source code: An exploratory study. In *Proc. 23rd Int'l Conf. Software Engineering*, pages 275–284. IEEE Computer Society, 2001.
- [465] Gail C. Murphy, Robert J. Walker, Elisa L. A. Baniassad, Martin P. Robillard, Albert Lai, and Mik A. Kersten. Does aspect-oriented programming work? *Comm. ACM*, 44(10):75–77, October 2001.
- [466] Gail C. Murphy, Robert J. Walker, and Elisa L.A. Baniassad. Evaluating emerging software development technologies: Lessons learned from assessing aspect-oriented programming. *IEEE Transactions on Software Engineering*, 25(4):438–455, 1999.
- [467] Shin Nakajima. Separation of concerns in early stage of framework development. In OOPSLA-AOP99 [490].
- [468] A. Navasa, M. A. Perez, J. M. Murillo, and J. Hernandez. Aspect-oriented software architecture: A structural perspective. In AOSD-EA02 [41].
- [469] Amparo Navasa, Miguel A. Pérez, and Juan M. Murillo. Developing component based systems using AOP concepts. In ECOOP-AOP01 [216].
- [470] R.D. Nebbe. Coordination and composition: The two paradigms underlying AOP? In ECOOP-AOP98 [218].
- [471] Andrey Nechypurenko. Using design patterns to improve aspect reusability and dynamics. In AOSD-PAT02 [43].
- [472] Torsten Nelson, Paulo Alencar, and Donald Cowan. Verifying multiple-perspective composition. In OOPSLA-AOP00 [487].
- [473] Torsten Nelson, Donald Cowan, and Paulo Alencar. Towards a formal model of object-oriented hyperslices. In OOPSLA-AOP99 [490].
- [474] Torsten Nelson, Donald Cowan, and Paulo Alencar. Formal verification of a bounded buffer with three separate concerns. In ICSE-AOP01 [331].
- [475] Torsten Nelson, Donald Cowan, and Paulo Alencar. Supporting formal verification of crosscutting concerns. In Yonezawa and Matsuo [684], pages 153–169.
- [476] Christian Nentwich, Wolfgang Emmerich, and Anthony Finkelstein. Edit, compile, debug—From hacking to distributed engineering. In AOSD-AOD02 [40].
- [477] P. Netinant, C. A. Constantinides, T. Elrad, and M. E. Fayad. Aspect-oriented frameworks (poster session): the design of adaptable operating systems. In *Addendum to the 2000 proceedings of the conference on Object-oriented programming, systems, languages, and applications (Addendum)*, pages 61–62. ACM Press, 2000.
- [478] Paniti Netinant, Tzilla Elrad, and Mohamed E. Fayad. A layered approach to building open aspect-oriented systems: A framework for the design of on-demand system demodularization. *Comm. ACM*, 44(10):83–85, October 2001.
- [479] Elissa Newman. Localizing views for separation of concerns. In ICSE-AOP01 [331].
- [480] Oscar Nierstrasz and Franz Achermann. Separation of concerns through unification of concepts. In ECOOP-AOP00 [215].
- [481] Oscar Nierstrasz and Franz Achermann. Supporting compositional styles for software evolution. In *Proceedings Int'l Symposium on Principles of Software Evolution (ISPSE 2000)*, pages 11–19. IEEE, Nov 1-2 2000.
- [482] Natsuko Noda and Tomoji Kishi. On aspect-oriented design—Applying “multi-dimensional separation of concerns” on designing quality attributes. In OOPSLA-AOP99 [490].
- [483] Natsuko Noda and Tomoji Kishi. Implementing design patterns using advanced separation of concerns. In OOPSLA-AOP01 [488].
- [484] Martin E. Nordberg III. Aspect-oriented dependency inversion. In OOPSLA-AOP01 [488].
- [485] A. Noutash, M. van Sinderen, M. Akşit, and L. Bergmans. Qos provisioning in corba by introducing aspect-oriented transport reflection point. In *ECOOP'2000 Workshop on Quality of Service*, June 2000.

- [486] Brain Odgers and Simon Thompson. Aspect-oriented process engineering. In *ECOOP-AOP99* [219].
- [487] *Workshop on Advanced Separation of Concerns (OOPSLA 2000)*. October 2000.
- [488] *Workshop on Advanced Separation of Concerns in Object-Oriented Systems (OOPSLA 2001)*, October 2001.
- [489] *Workshop on Tools for Aspect-Oriented Software Development (OOPSLA 2002)*. November 2002.
- [490] *Workshop on Multi-Dimensional Separation of Concerns (OOPSLA 1999)*. November 1999.
- [491] Doug Orleans. Separating behavioral concerns with predicate dispatch on if statement considered harmful. In *OOPSLA-AOP01* [488].
- [492] Doug Orleans. Incremental programming with extensible decisions. In *Kiezales* [368], pages 56–64.
- [493] Doug Orleans and Karl Lieberherr. Del: Dynamic adaptive programming in Java. In Yonezawa and Matsuo [684], pages 73–80.
- [494] H. Ossher, M. Kaplan, A. Katz, W. Harrison, and V. Kruskal. Specifying subject-oriented composition. *Theory and Practice of Object Systems*, 2(3), 1996.
- [495] H. Ossher and P. Tarr. Operation-level composition: A case in (join) point. In *ECOOP-AOP98* [218].
- [496] H. Ossher and P. Tarr. Multi-dimensional separation of concerns using hyperspaces. Technical Report 21452. IBM Research Report, April 1999.
- [497] H. Ossher and P. Tarr. Multi-dimensional separation of concerns and the hyperspace approach. In *Proc. Symposium on Software Architectures and Component Technology: The State of the Art in Software Development*. Kluwer, 2000.
- [498] H. Ossher and P. Tarr. The shape of things to come: Using multi-dimensional separation of concerns with Hyper/J to (re)shape evolving software. *Comm. ACM*, 44(10):43–50, October 2001.
- [499] Harold Ossher and William Harrison. Combination of inheritance hierarchies. In *Proc. 1992 Conf. Object-Oriented Programming Systems, Languages, and Applications*, October 1992.
- [500] Harold Ossher, William Harrison, Frank Budinsky, and Ian Simmonds. Subject-oriented programming: Supporting decentralized development of objects. In *Proc. 7th IBM Conf. Object-Oriented Technology*, July 1994.
- [501] Harold Ossher, William Harrison, and Peri Tarr. Software engineering tools and environments: A roadmap. In *Proceedings of the Conference on the Future of Software Engineering*, pages 261–277. ACM Press, 2000.
- [502] Harold Ossher, Matthew Kaplan, William Harrison, Alexander Katz, and Vincent Kruskal. Subject-oriented composition rules. In *Proc. 1995 Conf. Object-Oriented Programming Systems, Languages, and Applications*. October 1995.
- [503] Harold Ossher and Peri Tarr. Using subject-oriented programming to overcome common problems in object-oriented software development/evolution. In *Proc. 21st Int'l Conf. Software Engineering*, pages 687–688. IEEE Computer Society Press, 1999.
- [504] Harold Ossher and Peri Tarr. Hyper/J: Multi-dimensional separation of concerns for Java. In *Proc. 22nd Int'l Conf. Software Engineering*, pages 734–737. ACM Press, 2000.
- [505] Harold Ossher and Peri Tarr. On the need for on-demand remodularization. In *ECOOP-AOP00* [215].
- [506] Harold Ossher and Peri Tarr. Some micro-reuse challenges. In *ECOOP-AOP01* [216].
- [507] Harold Ossher and Perri Tarr. Multi-dimensional separation of concerns in hyperspace. In *ECOOP-AOP99* [219].
- [508] Harold Ossher and Petri Tarr. Hyper/J: Multi-dimensional separation of concerns for Java. In *Proc. 23rd Int'l Conf. on Software Engineering*, pages 729–730. IEEE Computer Society, 2001.
- [509] Klaus Ostermann. Dynamically composable collaborations with delegation layers. In *Mag-nusson* [427], pages 89–110.

- [510] Klaus Ostermann and Günter Kniesel. Independent extensibility—An open challenge for AspectJ and Hyper/J. In ECOOP-AOP00 [215].
- [511] Klaus Ostermann and Mira Mezini. Object-oriented composition is tangled. In ECOOP-AOP01 [216].
- [512] Klaus Ostermann and Mira Mezini. Object-oriented composition untangled. In *Proc. OOPSLA '01 Conf. Object Oriented Programming Systems Languages and Applications*, pages 283–299. ACM Press, 2001.
- [513] Klaus Ostermann and Mira Mezini. Conquering aspects with Caesar. In Akşit [21].
- [514] Johan Ovinger, Karl Lieberherr, and David Lorenz. Aspects and modules combined. Technical Report NU-CCS-02-03, College of Computer Science, Northeastern University, Boston, MA, March 2002.
- [515] J. Andrés Díaz Pace and Marcelo R. Campo. Analyzing the role of aspects in software design. *Comm. ACM*, 44(10):66–73, October 2001.
- [516] J. Andrés Díaz Pace, Mohamed E. Fayad, and Marcelo R. Campo. A language for simulation: Bringing separation to the front. In ECOOP-AOP00 [215].
- [517] J. Andrés Díaz Pace, F. Trilnik, and Marcelo R. Campo. How to handle interacting concerns? In OOPSLA-AOP00 [487].
- [518] Jens Palsberg. Class-graph inference for adaptive programs. *Theory and Practice of Object Systems*, 3(2):75–85, April 1997.
- [519] Jens Palsberg, Boaz Patt-Shamir, and Karl Lieberherr. A new approach to compiling adaptive programs. *Science of Computer Programming*, 29(3):303–326, 1997.
- [520] Jens Palsberg, Boaz Patt-Shamir, and Karl Lieberherr. A new approach to compiling adaptive programs. In Hanne Riis Nielson, editor, *European Symposium on Programming*, pages 280–295, Linköping, Sweden, April 1996. Springer Verlag Lecture Notes in Computer Science 1058.
- [521] Jens Palsberg, Cun Xiao, and Karl Lieberherr. Efficient implementation of adaptive software. *ACM Transactions on Programming Languages and Systems (TOPLAS)*, 17(2):264–292, 1995.
- [522] Thomas Panas, Jesper Andersson, and Uwe Aßmann. The editing aspect of aspects. In I. Hussain, editor, *Software Engineering and Applications (SEA2002)*, Cambridge, MA, November 2002. ACTA Press.
- [523] J. Pang and L. Blair. An adaptive run time manager for the dynamic integration and interaction resolution of features. In Akşit and Choukair [22].
- [524] Flavio De Paoli. Multidimensional separation of concerns. In ICSE-AOP00 [330].
- [525] D. L. Parnas. On the criteria to be used in decomposing systems into modules. *Comm. ACM*, 15(12):1053–1058, December 1972.
- [526] Renaud Pawlak. Nature and benefits of aspect-oriented programming. In ECOOP-AOP00 [215].
- [527] Renaud Pawlak, Laurence Duchien, Gerard Florin, Fabrice Legond-Aubry, Lionel Seinturier, and Laurent Martelli. A UML notation for aspect-oriented software design. In AOSD-UML02 [45].
- [528] Renaud Pawlak, Lionel Seinturier, Laurence Duchien, and Gérard Florin. JAC: A flexible solution for aspect-oriented programming in Java. In Yonezawa and Matsuoka [684], pages 1–24.
- [529] Luca Pazzi. Explicit aspect composition by part-whole state charts. In ECOOP-AOP99 [219].
- [530] G. Piccinelli and L. Mokrushin. Dynamic e-service composition in Dysco. In Choukair [132], pages 88–96.
- [531] G. Piccinelli and M. Stearns. Managing interaction concerns in web-service systems. In Akşit and Choukair [22].
- [532] Scott M. Pike. Binary trees: A challenge problem for separating concerns. In ICSE-AOP01 [331].
- [533] M. Pinto, M. Amor, L. Fuentes, and J.M. Troya. Collaborative virtual environment development: An aspect-oriented approach. In Choukair [132], pages 97–102.

- [534] M. Pinto, M. Amor, L. Fuentes, and J.M. Troya. Run-time coordination of components: Design patterns vs. component-aspect based platforms. In ECOOP-AOP01 [216].
- [535] Monica Pinto, Lidia Fuentes, Mohamed Fayad, and Jose Maria Troya. Separation of coordination in a dynamic aspect oriented framework. In Kiczales [368], pages 134–140.
- [536] Eduardo Kessler Piveta and Augusto Jun Devegil. Aspects in the rational unified process analysis and design workflow. In AOSD-AOD02 [40].
- [537] Eduardo Kessler Piveta and Luiz Carlos Zancanella. Aurélia: Aspect oriented programming using a reflective approach. In ECOOP-AOP01 [216].
- [538] A. Popovici, G. Alonso, and T. Gross. AOP support for mobile systems. In OOPSLA-AOP01 [488].
- [539] Andrei Popovici, Gustavo Alonso, and Thomas Gross. Just in time aspects. In Akşit [21].
- [540] Andrei Popovici, Thomas Gross, and Gustavo Alonso. Dynamic weaving for aspect-oriented programming. In Kiczales [368], pages 141–147.
- [541] Christian Prehofer. Feature interactions in statechart diagrams or graphical composition of components. In Kandé et al. [342].
- [542] Christian Prehofer. Graphical composition of components with feature interactions. In AOSD-UML02 [45].
- [543] Jane Pryor and Natalio Bastán. A reflective architecture for the support of aspect-oriented programming in Smalltalk. In ECOOP-AOP99 [219].
- [544] Elke Pulvermüller, Andreas Speck, and James O. Coplien. A version model for aspect dependency management. In Bosch [99], pages 70–79.
- [545] E. Putrycz and G. Bernard. Using aspect oriented programming to build a portable load balancing service. In Akşit and Choukair [22].
- [546] E. Putryez and G. Bernard. Client side reconfiguration on software components for load balancing. In Choukair [132], pages 111–116.
- [547] Rajeev R. Raje, Ming Zhong, and Tongyu Wang. Case study: a distributed concurrent system with aspectj. *ACM SIGAPP Applied Computing Review*, 9(2):17–23, 2001.
- [548] A. Rashid. On to aspect persistence. In *2nd International Symposium on Generative and Component-Based Software Engineering, LNCS 2177*, pages 453–463. Springer-Verlag Lecture Notes in Computer Science, October 2000.
- [549] A. Rashid and E. Pulvermueller. From object-oriented to aspect-oriented databases. In *11th International Conference on Database and Expert Systems Applications — DEXA 2000, LNCS 1873*, pages 125–134. Springer-Verlag Lecture Notes in Computer Science, September 2000.
- [550] Awais Rashid. A database evolution approach for object-oriented databases. In *Proc. IEEE Int'l Conf. Software Maintenance (ICSM 2001)*, pages 561–564, November 2001.
- [551] Awais Rashid. A hybrid approach to separation of concerns: The story of SADES. In Yonezawa and Matsuoka [684], pages 231–249.
- [552] Awais Rashid, editor. *Workshop on Aspect-Oriented Programming and Separation of Concerns (Lancaster)*, August 2001.
- [553] Awais Rashid. Weaving aspects in a persistent environment. *ACM SIGPLAN Notices*, 37(2), February 2002.
- [554] Awais Rashid and Ruzanna Chitchyan. Persistence as an aspect. In Akşit [21].
- [555] Awais Rashid and Gerald Kotonya. Risk management in component-based development: A separation of concerns perspective. In ECOOP-AOP01 [216].
- [556] Awais Rashid, Ana Moreira, and João Araújo. Modularisation and composition of aspectual requirements. In Akşit [21].
- [557] Awais Rashid and Peter Sawyer. Aspect-orientation and database systems: An effective customisation approach. *IEE Proceedings - Software*, 148(5):156–164, October 2001.
- [558] Barry Redmond and Vinny Cahill. Supporting unanticipated dynamic adaptation of

- application behaviour. In Magnusson [427], pages 205–230.
- [559] A. M. Reina. Separating the navigational aspect. In Akşit and Choukair [22].
- [560] A.M. Reina and J. Torres. Analysing the navigational aspect. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [561] R. Q. Reis, C. A. Lima Reis, H. Schlebbe, and D. J. Nunes. Towards an aspect-oriented approach to improve the reusability of software process models. In AOSD-EA02 [41].
- [562] Søren Top, Bo Jorgensen, Claus Thybo, and Peter Thusgaard. Meta-level architectures for fault tolerant control (FTC) in embedded software systems. In ECOOP-AOP01 [216].
- [563] Karen Renaud. HERCULE: Non-invasively tracking Java component-based application activity. In Bertino [85], pages 447–471.
- [564] Joel Richardson and Peter Schwarz. Aspects: extending objects to support multiple independent roles. In *Proceedings of the 1991 ACM SIGMOD International Conference on Management of Data*, pages 298–307. ACM Press, 1991.
- [565] Bert Robben and Patrick Stevaert. Aspects on TV. In ECOOP-AOP00 [215].
- [566] Martin P. Robillard and Gail C. Murphy. Migrating a static analysis tool to AspectJ. In OOPSLA-AOP99 [490].
- [567] Martin P. Robillard and Gail C. Murphy. An exploration of a lightweight means of concern separation. In ECOOP-AOP00 [215].
- [568] Martin P. Robillard and Gail C. Murphy. Analyzing concerns using class member dependencies. In ICSE-AOP01 [331].
- [569] Martin P. Robillard and Gail C. Murphy. Capturing concern descriptions during program navigation. In OOPSLA-AOP02 [489].
- [570] Yves Roudier and Yuuji Ichisugi. Mixin composition strategies for the modular implementation of aspect weaving. In ICSE-AOP98 [332].
- [571] Isabelle Rouvellou, Stanley M. Sutton Jr., and Stefan Tai. Multidimensional separation of concerns in middleware. In ICSE-AOP00 [330].
- [572] F. Sánchez, J. Hernandez, J.M. Murillo, and E. Pedarza. Run-time adaptability of synchronization policies in concurrent object-oriented languages. In ECOOP-AOP98 [218].
- [573] Naomi Sapir, Shmuel Tyszberowicz, and Amiram Yehudai. Extending uml with aspect usage constraints in the analysis and design phases. In Kandé et al. [342].
- [574] A. Sassen, G. Amoros, P. Donth, K. Geijs, J. Jézéquel, K. Odent, N. Plouzeau, and T. Weis. QCCS: A methodology for the development of contract-aware components based on aspect-oriented design. In AOSD-EA02 [41].
- [575] Juha Savolainen. Improving product line development with subject-oriented programming. In ICSE-AOP00 [330].
- [576] Juha Savolainen. Towards multi dimensional methods. In OOPSLA-AOP00 [487].
- [577] Vibha Sazawal. Separation of concerns for ubiquitous computing. In ICSE-AOP01 [331].
- [578] Nathanael Schärli and Franz Achermann. Partial evaluation of inter-language wrappers. In *Workshop on Composition Languages, WCL'01 (ESEC/FSE)*, September 2001.
- [579] Arno Schmidmeier. Transferring persistence concepts in Java ODBMSs to AspectJ based on ODMG standards. In Rashid [552].
- [580] R. Schmidt and U. Alßmann. Extending aspect-oriented programming in order to flexibly support workflows. In ICSE-AOP98 [332].
- [581] S. Schonger, E. Pulvermueller, and S. Sarstedt. Aspect oriented programming and component weaving: Using XML representations of abstract syntax trees. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [582] Karsten Schulz and Maria E. Orlowska. Architectural issues for cross-organizational B2B interactions. In Choukair [132], pages 79–87.
- [583] Mario Schüpany, Christa Schwanninger, and Egon Wuchner. Aspect-oriented programming for .NET. In AOSD-PAT02 [43].

- [584] Marc Segura-Devillechaise, Jean-Marc Menaud, Gilles Muller, and Julia L. Lawall. Web cache prefetching as an aspect: Towards a dynamic-weaving based solution. In Akşit [21].
- [585] Lionel Seinturier. JST: An object synchronization aspect for Java. In ECOOP-AOP99 [219].
- [586] Linda Seiter. *Design Patterns for Managing Evolution*. PhD thesis, Northeastern University, 1996.
- [587] Linda Seiter, Mira Mezini, and Karl Lieberherr. Dynamic component gluing. In Ulrich Eisenecker and Krzysztof Czarnecki, editors, *First Int'l Symposium on Generative and Component-Based Software Engineering*. Springer, 1999.
- [588] Linda Seiter, Mira Mezini, and Karl Lieberherr. Dynamic component gluing. In OOPSLA-AOP99 [490].
- [589] Linda M. Seiter, Jens Palsberg, and Karl J. Lieberherr. Evolution of Object Behavior using Context Relations. In David Garlan, editor, *Symposium on Foundations of Software Engineering, SIGSOFT*, pages 46–57. San Francisco, 1996. ACM Press (SIGSOFT).
- [590] Linda M. Seiter, Jens Palsberg, and Karl J. Lieberherr. Evolution of object behavior using context relations. *IEEE Trans. Soft. Eng.*, 24(1):79–92, January 1998.
- [591] Damien Sereni and Oege de Moor. Static analysis of aspects. In Akşit [21].
- [592] Mati Shomrat and Amiram Yehudai. Obvious or not? Regulating architectural decisions using aspect-oriented programming. In Kiczales [368], pages 3–9.
- [593] Marcelo Sihman and Shmuel Katz. A calculus of superimpositions for distributed systems. In Kiczales [368], pages 28–40.
- [594] Antonio Rito Silva. Separation and composition of overlapping and interacting concerns. In OOPSLA-AOP99 [490].
- [595] Ignacio Silva-Lepe. Abstracting graph-based specifications of object-oriented programs. In *ACM Computer Science Conference, Symposium on Applied Computing*, pages 447–451, Phoenix, Arizona, 1994. ACM.
- [596] Ian Simmonds. Clues in the search for ever more valuable separations of concern. In ICSE-AOP00 [330].
- [597] Ian Simmonds and David Ing. Clues in the search for ever more valuable separations of concern. In OOPSLA-AOP00 [487].
- [598] Mark Skipper. The Watson subject compiler and AspectJ (A critique of practical objects). In OOPSLA-AOP99 [490].
- [599] Mark Skipper. A model of composition oriented programming. In ICSE-AOP00 [330].
- [600] Mark Skipper. Semantics of an object-oriented language with aspects and advice. In ECOOP-AOP01 [216].
- [601] Yannis Smaragdakis and Don Batory. Mixin layers: An object-oriented implementation technique for refinements and collaboration-based designs. *ACM Transactions on Software Engineering and Methodology (TOSEM)*, 11(2):215–255, 2002.
- [602] Rik Smooty. Aspects can be objects, too. In OOPSLA-AOP02 [489].
- [603] Gregor Snelting and Frank Tip. Theory and formal techniques semantics-based composition of class hierarchies. In Magnusson [427], pages 562–584.
- [604] S. Soares and P. Borba. PaDA: A pattern for distribution aspects. In *Second Latin American Conference on Pattern Languages of Programming — SugarLoafPLoP*, August 2002.
- [605] Sergio Soares, Eduardo Laureano, and Paulo Borba. Implementing distribution and persistence aspects with aspectj. In *Proceedings of the 17th ACM conference on Object-oriented programming, systems, languages, and applications*, pages 174–190. ACM Press, 2002.
- [606] A. Speck, M. Clauss, and B. Franczyk. Concerns of variability in bottom-up product-lines. In Costanza et al. [182]. Technical report IAI-TR-2002-1, ISSN 0944-8535.
- [607] Andreas Speck, Elke Pulvermüller, and Mira Mezini. Reusability of concerns. In ECOOP-AOP00 [215].
- [608] Olaf Spinczyk, Andreas Gal, and Wolfgang Schröder-Preikschat. Aspectc++: an aspect-oriented extension to the c++ programming

- language. In *Proceedings of the Fortieth International Conference on Tools Pacific*, pages 53–60. Australian Computer Society, Inc., 2002.
- [609] Erlend Stav. Extending a visual tool. A challenging problem for extending object-orientation. In ECOOP-AOP00 [215].
 - [610] Dominik Stein, Stefan Hanenberg, and Rainer Unland. Designing aspect-oriented crosscutting in UML. In AOSD-UML02 [45].
 - [611] Dominik Stein, Stefan Hanenberg, and Rainer Unland. On representing join points in the uml. In Kandé et al. [342].
 - [612] Dominik Stein, Stefan Hanenberg, and Rainer Unland. An UML-based aspect-oriented design notation. In Kiczales [368], pages 106–112.
 - [613] Peter Sties and Wolfgang Kellerer. A generic and implementation independent service description model. In Choukair [132], pages 163–168.
 - [614] Zoran Stojanovic and Ajantha Dahanayak. Components and viewpoints as integrated separations of concerns in system designing. In AOSD-AOD02 [40].
 - [615] G. T. Sullivan. Aspect-oriented programming using reflection and meta-object protocols. *Comm. ACM*, 44(10):95–97, October 2001.
 - [616] Gregory T. Sullivan. Aspect-oriented programming using reflection. In OOPSLA-AOP01 [488].
 - [617] Kevin Sullivan, Lin Gu, and Yuanfang Cai. Non-modularity in aspect-oriented languages: Integration as a crosscutting concern for AspectJ. In Kiczales [368], pages 19–27.
 - [618] Thanwadee Sunetnanta and Anthony Finkelstein. Automated consistency checking for multiperspective software specifications. In ICSE-AOP01 [331].
 - [619] S. M. Sutton Jr. Early-stage concern modeling. In AOSD-EA02 [41].
 - [620] Stanley Sutton Jr. and Isabelle Rouvellou. Modeling of software concerns in Cosmos. In Kiczales [368], pages 127–133.
 - [621] Stanley M. Sutton Jr. Multiple dimensions of concern in software testing. In OOPSLA-AOP99 [490].
 - [622] Stanley M. Sutton Jr. and Isabelle Rouvellou. Concerns in the design of a software cache. In OOPSLA-AOP00 [487].
 - [623] Stanley M. Sutton Jr. and Isabelle Rouvellou. Applicability of categorization theory to multidimensional separation of concerns. In OOPSLA-AOP01 [488].
 - [624] Stanley M Sutton, Jr. and Isabelle Rouvellou. Issues in the design and implementation of a concern-space modeling schema. In ICSE-AOP01 [331].
 - [625] Stanley M. Sutton Jr. and Peri Tarr. Aspect-oriented design needs concern modeling. In AOSD-AOD02 [40].
 - [626] Davy Suvée and Wim Vanderperren. JASCo: an aspect-oriented approach tailored for component based software development. In Akşit [21].
 - [627] Junichi Suzuki and Yoshikazu Yamamoto. Extending UML with aspects: Aspect support in the design phase. In ECOOP-AOP99 [219].
 - [628] Peri Tarr, William Harrison, Harold Ossher, Anthony Finkelstein, Bashar Nuseibeh, and Dewayne Perry. Workshop on multidimensional separation of concerns in software engineering. *ACM SIGSOFT Software Engineering Notes*, 26(1):78–81, 2001.
 - [629] Peri Tarr, William Harrison, Harold Ossher, Anthony Finkelstein, Bashar Nuseibeh, and Dewayne Perry. Workshop summary. In ICSE-AOP00 [330].
 - [630] Peri Tarr, Harold Ossher, William Harrison, and Stanley M. Sutton Jr. N degrees of separation: Multi-dimensional separation of concerns. In *Proc. 21st Int'l Conf. Software Engineering (ICSE'1999)*, pages 107 – 119. IEEE Computer Society Press, May 1999.
 - [631] Peri Tarr, Harold Ossher, and Johannes Henkel. Visualization as an aid to compositional software engineering. In OOPSLA-AOP01 [488].
 - [632] M. Tatsubori. Separation of distribution concerns in distributed java programming. In

- OOPSLA'01, Doctoral Symposium*, October 2001.
- [633] B. Tekinerdoğan and M. Akşit. Adaptability in object-oriented development. In M. Muhlhauser, editor, *Special Issues in Object-Oriented Programming*, pages 7–11, 1996.
 - [634] B. Tekinerdoğan and M. Akşit. Deriving design aspects from canonical models. In ECOOP-AOP98 [218].
 - [635] Bedir Tekinerdoğan and Mehmet Akşit. Separation and composition of concerns through synthesis-based design. In OOPSLA-AOP00 [487].
 - [636] Aleksandra Tesanovic, Jörgen Hansson, Dag Nyström, and Christer Norström. Integrating symbolic worst-case execution time analysis with aspect-oriented system development. In OOPSLA-AOP02 [489].
 - [637] Craig Thompson, Paul Pazandak, Venu Vasudevan, Frank Manola, Mark Palmer, Gil Hansen, and Tom Bannon. Intermediary architecture: Interposing middleware object services between web client and server. *ACM Computing Surveys*, 31(2es):14, 1999.
 - [638] Kresten Krab Thorup. Contextual class extensions. In ECOOP-AOP97 [217].
 - [639] M. Tokoro and R. Pareschi, editors. *Proc. 8th European Conf. Object-Oriented Programming*. Springer Verlag LNCS 821, July 1994.
 - [640] Soren Top, Bo Norregaard, and Christo Angelov. Separation of fault tolerant control concern in embedded control system. In AOSD-AOD02 [40].
 - [641] E. Truyen, B. Vanhaute, W. Joosen, P. Verbaeten, and B. Nørregaard Jørgensen. A dynamic customization model for distributed component-based systems. In Choukair [132], pages 147–156.
 - [642] Eddy Truyen and Wouter Joosen an. Customization of on-line services with simultaneous client-specific views. In ICSE-AOP01 [331].
 - [643] Eddy Truyen, Wouter Joosen, and Pierre Verbaeten. Run-time support for aspects in distributed system infrastructure. In AOSD-PAT02 [43].
 - [644] Eddy Truyen, Bo Nørregaard Jørgensen, and Wouter Joosen. Customization of object request brokers through dynamic reconfiguration. In *Proc. of Tools Europe 2000*, June 2000.
 - [645] Eddy Truyen, Bo Norregaard Jorgensen, Wouter Joosen, and Pierre Verbaeten. Aspects for run-time component integration. In ECOOP-AOP00 [215].
 - [646] Eddy Truyen, Bart Vanhaute, Wouter Joosen, Pierre Verbaeten, and Bo Nørregaard Jørgensen. Customization of on-line services with simultaneous client-specific views. In ECOOP-AOP01 [216].
 - [647] Eddy Truyen, Bart Vanhaute, Wouter Joosen, Pierre Verbaeten, and Bo Nørregaard Jørgensen. Dynamic and selective combination of extensions in component-based applications. In *Proc. 23rd Int'l Conf. Software Engineering (ICSE'2001)*, May 2001.
 - [648] David B. Tucker and Shriram Krishnamurthi. Pointcuts and advice in higher-order languages. In Akşit [21].
 - [649] Naoyasu Ubayashi and Tetsuo Tamai. Separation of concerns in mobile agent applications. In Yonezawa and Matsuoka [684], pages 89–109.
 - [650] Naoyasu Ubayashi and Tetsuo Tamai. Aspect oriented programming with model checking. In Kiczales [368], pages 148–154.
 - [651] David Ungar. The limits to factoring. In OOPSLA-AOP99 [490].
 - [652] Peter Van Roy, Seif Haridi, Per Brand, Gert Smolka, Michael Mehl, and Ralf Scheidhauer. Using mobility to make transparent distribution practical. In ECOOP-AOP97 [217].
 - [653] Koenraad Vandenborre, Muna Matar, and Ghislain Hoffman. Orthogonal persistence using aspect oriented programming. In AOSD-PAT02 [43].
 - [654] Glenn Vanderburg. Position paper. In *OOPSLA 2001 Software Archaeology Workshop*, October 2001.
 - [655] Wim Vanderperren. A pattern based approach to separate tangled concerns in component based development. In AOSD-PAT02 [43].

- [656] Bart Vanhaute, Bart De Win, and Bart De Decker. Building frameworks in AspectJ. In ECOOP-AOP01 [216].
- [657] Bart Vanhaute, Eddy Truyen, Wouter Joosen, and Pierre Verbaeten. Composing non-orthogonal meta-programs. In OOPSLA-AOP99 [490].
- [658] Matthias Veit and Stephan Herrmann. Model-view-controller and object teams: A perfect match of paradigms. In Aksit [21].
- [659] John Viega. Separation of concerns for security. In ICSE-AOP00 [330].
- [660] Kris De Volder and Theo D'Hondt. Aspect-oriented logic meta programming. In P. Cointe, editor, *Meta-Level Architectures and Reflection, 2nd Int'l Conf. Reflection*, volume 1616 of *LNCS*, pages 250-272. Springer Verlag, 1999.
- [661] D. Vollmann. Visibility of join-points in AOP and implementation languages. In Costanza et al. [182]. Technical report IAI-TR-2002-1. ISSN 0944-8535.
- [662] Christina von Flach G. Chavez and Carlos J. P. de Lucena. Design-level support for aspect-oriented software development. In OOPSLA-AOP01 [488].
- [663] Valentino Vranić. AspectJ paradigm model: A basis for multi-paradigm design for aspectj. In Bosch [99], pages 48-57.
- [664] Dennis Wagelaar and Lodewijk Bergmans. Using a concept-based approach to aspect-oriented software design. In AOSD-AOD02 [40].
- [665] R.J. Walker, E.L.A. Baniassad, and G. Murphy. Assessing aspect-oriented programming and design. In ECOOP-AOP98 [218].
- [666] Robert J. Walker, Elisa L.A. Baniassad, and Gail C. Murphy. An initial assessment of aspect-oriented programming. In *Proc. 21st Int'l Conf. Software Engineering (ICSE '99)*, pages 120-130, 1999.
- [667] Robert J. Walker and Gail C. Murphy. Join-points as ordered events: Towards applying implicit context to aspect-orientation. In ICSE-AOP01 [331].
- [668] Mitchell Wand, Gregor Kiczales, and Chris Dutchyn. A semantics for advice and dynamic join points in aspect-oriented programming. In AOSD-FOAL02 [42], pages 1-8.
- [669] Hans Wegener and Ahmed Rida. Reengineering of metalevel abstractions with data mining methods. In OOPSLA-AOP00 [487].
- [670] Ian Welch and Robert Stroud. Load-time application of aspects to JAVA COTS software. In ECOOP-AOP99 [219].
- [671] Ian Welch, Robert J. Stroud, and Alexander Romanovsky. Aspects of exceptions at the meta-level. In Yonezawa and Matsuoka [684], pages 280-282.
- [672] Ian S. Welch and Robert J. Stroud. Security and aspects: A metaobject protocol viewpoint. In AOSD-PAT02 [43].
- [673] Ian S. Welch, Robert J. Stroud, and Alexander Romanovsky. Aspects of exceptions at the meta-level. In Rashid [552].
- [674] M. Wermelinger, J. L. Fiadeiro, L. Andrade, G. Koutsoukos, and J. Gouveia. Separation of core concerns: Computation, coordination, and configuration. In OOPSLA-AOP01 [488].
- [675] J. C. Wichman. The development of a preprocessor to facilitate composition filters in the java language. Master's thesis, University of Twente, 1999.
- [676] Edward Willink and Vyacheslav Muchnick. Weaving a way past the C++ One Definition Rule. In ECOOP-AOP99 [219].
- [677] B. De Win, J. Van den Bergh, F. Matthijs, B. De Decker, and W. Joosen. A security architecture for electronic commerce applications. In S. Qing and J. Eloff, editors, *Information Security for Global Information Infrastructures*, pages 491-500. Kluwer Academic Publishers, 2000.
- [678] Bart De Win, Bart Vanhaute, and Bart De Decker. How aspect-oriented programming can help to build secure software. *Informatica*, 26(2):141-149, 2001.
- [679] Eric Wohlstadter and Prem Devanbu. A lazy approach to separating architectural concerns. In ICSE-AOP01 [331].

- [680] Eric Wohlstadter, Aaron Keen, Stoney Jackson, and Premkumar Devanbu. Accommodating evolution in AspectJ. In OOPSLA-AOP01 [488].
- [681] Eric Wohlstadter, Brian Toone, and Prem Devanbu. A framework for flexible evolution in distributed heterogeneous systems. In *Proceedings of the Workshop on Principles of Software Evolution*, pages 39–42. ACM Press, 2002.
- [682] Cun Xiao. *Adaptive Software: Automatic Navigation Through Partially Specified Data Structures*. PhD thesis, Northeastern University, 1994.
- [683] Annie T.T. Ying, Gail C. Murphy, Raymond T. Ng, and Mark C. Chu-Carroll. Using version information for concern interface and code-assist. In OOPSLA-AOP02 [489].
- [684] A. Yonezawa and S. Matsuoka, editors. *Meta-level Architectures and Separation of Cross-cutting Concerns 3rd Int'l Conf. (Reflection 2001)*, LNCS 2192. Springer-Verlag, September 2001.
- [685] Aida Atef Zakaria, Hoda Hosny, and Amir Zeid. A uml extension for modeling aspect-oriented systems. In Kandé et al. [342].
- [686] Charles Zhang and H-A. Jacobsen. Quantifying aspects in middleware platforms. In Aksit [21].
- [687] Hongyu Zhang, Stan Jarzabek, and Soe Myat Swe. X-frames approach for handling variants within concerns. In ICSE-AOP01 [331].
- [688] Hongyu Zhang, Stan Jarzabek, and Soe Myat Swe. XVCL approach to separating concerns in product family assets. In Bosch [99], pages 36–47.
- [689] Jianjun Zhao. Change impact analysis for aspect-oriented software evolution. In *Proceedings of the workshop on Principles of software evolution*, pages 108–112. ACM Press, 2002.
- [690] Jianjun Zhao. Slicing aspect-oriented software. In *Proc. 10th IEEE International Workshop on Program Comprehension*, pages 251–260, June 2002.
- [691] Jianjun Zhao. Tool support for unit testing of aspect-oriented software. In OOPSLA-AOP02 [489].
- [692] John Zinky, Joe Loyall, Partha Pal, Richard Shapiro, Richard Schantz, James Megquier, Michael Atighetchi, Craig Rodrigues, and David Karr. An AOP challenge problem: Managing QoS on interactions between distributed objects. In ECOOP-AOP00 [215].
- [693] John Zinky, Richard Shapiro, Joe Loyall, Partha Pal, and Michael Atighetchi. Separation of concerns for reuse of systemic adaptation in QuO 3.0. In ECOOP-AOP01 [216].
- [694] John A. Zinky, David E. Bakken, and Richard D. Schantz. Architectural support for quality of service for CORBA objects. *Theory and Practice of Object Systems*, 3(1):19 pages, January 1997.