EDITORIAL

The dirty dozen of 4OR

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Abstract This is the traditional triennial note used by the Editors to give the readers of *4OR* information on the state of the journal and its future. In the three years that have passed since the last editorial note (Liberti et al. in 4OR 10(1):1–13, 2012), three volumes (each containing four issues) of the journal have been published: vol. 10 (2012), vol. 11 (2013) and vol. 12 (2014).

1 What has happened since 2011?

We summarize the main events in the life of the journal since the end of 2011.

- 40R continues to be indexed by ISI. Its impact factors have been:
 - 0.323 for 2011 (published in June 2012);
 - 0.730 for 2012 (published in June 2013), and
 - 0.918 for 2013 (published in July 2014).

This sharp increase is due both to the increased visibility of the journal and to the change of the editorial policy on the PhD Thesis abstracts, which receive practically no citation because authors tend to cite the original thesis. Previously,

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our four page abstracts were counted by ISI as regular papers hence penalizing our impact factor. After a long negotiation with Thomson Reuters, we decided to limit them to a single section of at most two pages, without author's affiliation, abstract and bibliography, so that they are now classified as sort of *Letters to the Editors* and not counted as papers. The new policy started in 2012, hence it influenced the impact factors starting from 2013.

- Our current 0.918 impact factor is very satisfactory for a relatively young journal:
 it is higher than that of well established journals like Journal of the Operational Research Societies, Central European Journal of Operations Research,
 Optimization, Networks, Discrete Optimization, Operations Research Letters,
 Mathematical Methods of Operations Research, International Transactions of
 Operations Research, and just few hundredths below that of Mathematics of Operations Research, Computational Optimization and Applications, and Optimization
 Letters.
- The quality of the Invited Surveys that we keep publishing led to a new (third) volume of the *Annals of Operations Research* Liberti et al. (2013b), edited by the Editors-in-Chief, where updated versions of the surveys have been republished.
- Along the triennium, the board of associate editors was enlarged, to better reflect
 the fields of Operations Research in which we receive many submissions. We
 would like to welcome all editors, and thank them for their effort towards the
 development of 4OR.

2 Plagiarism and other tricks

In the first years of its existence 4OR has been subject to a number of attempts to publish plagiarized articles, that have been publicized by 4OR editorials. The most (in)famous cases were those concerning

- Dănuţ Marcu: see the Editorials by Bouyssou et al. (2006, 2009) that were followed by an investigation by Soifer (2007);
- M. Sreenivas and T. Srinivas: see the Editorial by Bouyssou et al. (2009) that was followed by an investigation by Douglas Arnold, President of SIAM (see http://www.siam.org/journals/plagiary/index.php), and by the retract of articles published by *International Journal of Statistics and Management System* (see http://anson.ucdavis.edu/~jiang/IJSMS/3-10-retraction.html) and *RAIRO* [see the editorial by Mahey (2010)].

To our knowledge, after these reports the activities of these individuals have terminated: nowadays, if one googles their names, evidence of their misconduct immediately shows up, so they have very little possibility of pursuing their objective.

In 2012 Springer made the ©Ithenticate software available to the Editors-in-Chief. All submissions are now checked using it, which allowed us to detect new (minor) plagiarism attempts: the authors have been banned from submitting to 40R (you can see the list of banned authors at our web page http://www.4or.be/Plagiarism.html).

Frequently, an unmasked plagiarist (normally, a professor) persuades one of his co-authors (normally, a student) to take over the full responsibility of the attempted action (see http://nanopolitan.blogspot.it/2009/11/plagiarism-hall-of-shame-case-



from.html. At 40R, all authors of a submitted paper are now notified by email at the beginning of the reviewing process.

In recent years, other tools have been developed that threaten the journals' scientific integrity. In 2012, the Elsevier Editorial System (EES) was hacked. Quoting from Elsevier Connect (see http://www.elsevier.com/connect/faking-peer-reviews),

What happened here is that in late October, one of the editors of *Optics & Laser Technology* alerted our EES team that reviewers for two of his assigned submissions had been invited but not by him. Our team immediately launched an investigation and discovered that someone had been able to retrieve the EES username and password information for this editor.

More recently, a somehow similar trick was implemented, as revealed by Ferguson et al. (2014) in *Science*. Certain journals ask or allow a submitting author to provide a list of possible reviewers. In the unmasked case, an "author" suggested names of real scientists but with bogus email addresses, that were in fact owned by himself. He then sent positive referee reports, recommending acceptance of the paper. At *4OR* we do not allow submitting authors to suggest potential reviewers for their papers.

Another kind of misconduct was recently brought to light by the same journal [see Hvistendahl (2013)]. Quoting *Science*,

"There are some authors who don't have much use for their papers after they're published, and they can be transferred to you", a sales agent for a company called Wanfang Huizhi told a Science reporter posing as a scientist. Wanfang Huizhi, the agent explained, acts as an intermediary between researchers with forthcoming papers in good journals and scientists needing to snag publications. The company would sell the title of co-first author on the cancer paper for 90,000 yuan (\$14,800). Adding two names as first author and corresponding author would run \$26,300, with a deposit due upon acceptance and the rest on publication. A purported sales document from Wanfang Huizhi obtained by Science touts the convenience of this kind of arrangement: "You only need to pay attention to your academic research. The heavy labor can be left to us. Our service can help you make progress in your academic path!"

When a paper is accepted by 4OR, any variation in the authors list must be highlighted to the Editors-in-Chief: It is at their discretion as to whether these changes are allowed.

3 What has been published?

In addition to editorials like the present one, the journal currently publishes papers in five different sections:

- invited surveys;
- research papers;
- abstracts of PhD Theses;
- industry papers;
- education papers.



Type of papers	Number of papers	Number of pages	Percentage of pages (%)
Editorials	1	14	1.2
Invited surveys	12	372	31.3
Research papers	36	676	56.9
Industry papers	2	48	4.0
PhD Thesis abstracts	37	74	6.2
Errata	1	4	0.3
Total	89	1188	100

Table 1 Types of papers published (2012–2014)^a

All types of papers but the last one were published in volumes 10–12. A synthetic view of what was published appears in Table 1. We detail below, for each of the sections of the journal, which papers were published and how they were selected.

4 Invited surveys

Twelve invited surveys (one per issue) were published in volumes 10–12. The average length of these papers was 31 pages (compared to 32 in volumes 1–3, 39 in volumes 4–6, and 30 in volumes 7–9) with a minimum of 18 pages and a maximum of 51 pages. One fourth of the journal is devoted to these texts. Although the room taken up by these surveys decreases the space left for research articles, our survey section is an established and appreciated feature of *40R*. As survey articles are often referenced, the visibility of the journal is increased, which is beneficial to all authors in the long run.

Our policy is to publish surveys written by well-established scholars, presenting the state-of-the-art of relevant Operations Research areas. Papers in this section are solicited by one of the Editors-in-Chief, and are reviewed collectively by all of them. A further priority of ours is that the survey authors should come from a large variety of countries (see Table 2; we conventionally record the affiliation of the majority of authors, using that of the first author to break ties). Two out of twelve surveys came from outside the EU.

We detail in Sect. 4.1 how the *Annals of Operations Research* volume containing the ones in volumes 7–9 saw light. We detail in Sect. 4.2 the invited surveys that were published in volumes 10–12.

4.1 The annals of operations research volumes

There is a long standing collaboration between 40R and Annals of Operations Research (AOR). Every three years, AOR publishes a special issue which collects all of the surveys published in the preceding three years by 40R. This collaboration started in 2006 at the suggestion of Peter L. Hammer (former Editor-in-Chief of



^a Plus 10 pages of acknowledgements

Table 2 Country of origin of invited surveys published (2012–2014)

Country	Number of surveys	Percentage (%)
France	3	25.0
Italy	3	25.0
Austria	2	16.8
Belgium	1	8.3
Spain	1	8.3
Switzerland	1	8.3
USA	1	8.3
Total	12	100.0

AOR), and is now being continued by Peter's successor Endre Boros. These special AOR issues are guest-edited by the three Editors-in-Chief of *4OR*. The first issue appeared in Bouyssou et al. (2007), the second in Bouyssou et al. (2010) and the third in Liberti et al. (2013b). We summarize the contents of the last issue here, referring the reader to Liberti et al. (2013a) for a more detailed description.

- 1. Constraint programming-based column generation [4OR7/2, Gualandi and Malucelli (2009)]: Stefano Gualandi and Federico Malucelli survey recent applications and advances of the constraint programming-based column generation framework, where the master subproblem is solved by traditional OR techniques, while the pricing subproblem is solved by constraint programming.
- 2. The core of games on ordered structures and graphs [40R 7/3, Grabisch (2009)]: Michel Grabisch gives a unified view of the results that have been obtained by defining a game on a subcollection of the power set of the set of players, examining the implications on the mathematical structure of the core.
- 3. Intra-domain traffic engineering with shortest path routing protocols [40R 7/4, Altın et al. (2009)]: Aysegül Altın, Bernard Fortz, Mikkel Thorup and Ümit Hakan review optimization techniques that have been developed for managing intra-domain routing in networks operated with shortest path routing protocols, and the state-of-the-art research that has been carried out in this direction.
- 4. Extended formulations in combinatorial optimization [40R 8/1, Conforti et al. (2010)]: Michele Conforti, Gérard Cornuéjols and Giacomo Zambelli survey the size of perfect formulations for combinatorial optimization problems, with special emphasis on situations where the addition of a polynomial number of extra variables allows a formulation with a polynomial number of inequalities.
- 5. Robust portfolio asset allocation and risk measures [40R 8/2, Scutellà and Recchia (2010)]: Maria Grazia Scutellà and Raffaella Recchia discuss the mathematical models, and related algorithmic approaches, that have recently been proposed to address uncertainty in portfolio asset allocation, focusing on robust optimization methodology.
- 6. Recent progress of local search in handling the time window constraints of the vehicle routing problem [40R 8/3, Hashimoto et al. (2010)]: Hideki Hashimoto, Mutsunori Yagiura, Shinji Imahori and Toshihide Ibaraki review recent results on how to handle hard and soft time window constraints of the vehicle routing problem, putting emphasis on its different definitions and algorithms.



 Makespan minimization in online scheduling with machine eligibility [40R 8/4, Lee et al. (2010)]: Kangbok Lee, Joseph Y.-T. Leung and Michael L. Pinedo examine online scheduling problems in parallel machine environments with various types of machine eligibility constraints, and the makespan as objective function.

- 8. Probabilistic decision graphs for optimization under uncertainty [40R 9/1, Jensen and Nielsen (2011)]: Finn Jensen and Thomas Nielsen survey probabilistic decision graphs for modeling and solving decision problems under uncertainty, providing an introduction to influence diagrams and to alternative representation languages.
- 9. Airport runway scheduling [40R 9/2, Bennell et al. (2011)]: Julia Bennell, Mohammad Mesgarpour and Chris Potts review the main solution techniques (dynamic programming, branch and bound, heuristics and meta-heuristics) that are used for scheduling aircraft landings and take-offs.
- 10. Political districting: from classical models to recent approaches [40R 9/3, Ricca et al. (2011)]: Federica Ricca, Andrea Scozzari and Bruno Simeone introduce and discuss selected optimization models and algorithms for political districting, which gave rise to the main lines of research on this topic in the Operations Research literature of the last five decades.
- 11. Mixed integer nonlinear programming tools: a practical overview [40R 9/4, D'Ambrosio and Lodi (2011)]: Claudia D'Ambrosio and Andrea Lodi review available tools for solving mixed integer nonlinear programming problems, with the aim of giving the reader a flavor of the difficulties one can face in this field.

4.2 Invited surveys: 2012-2014

The following surveys were published in volumes 10–12.

- 1. Learning from conflicts in propositional satisfiability [40R 10/1, Hamadi et al. (2012)]: Youssef Hamadi, Saïd Jabbour and Lakhdar Saïs discuss the application of machine learning techniques to SAT solving.
- 2. The symmetric quadratic knapsack problem: approximation and scheduling applications [40R 10/2, Kellerer and Strusevich (2012)]: Hans Kellerer and Vitaly Strusevich discuss fully polynomial time approximation schemes for the Symmetric Quadratic Knapsack Problem and the Half-Product Problem, and their application to various scheduling problems.
- 3. Relaxations of mixed integer sets from lattice-free polyhedra [40R 10/3, Pia and Weismantel (2012)]: Alberto Del Pia and Robert Weismantel give an introduction to a recently established link between the geometry of numbers and mixed integer optimization.
- 4. Semidefinite relaxations for partitioning, assignment and ordering problems [40R 10/4, Rendl (2012)]: Franz Rendl introduces the field of semidefinite optimization for non-experts. The basic concepts are explained on a mostly intuitive level. A variety of semidefinite optimization models are presented on a selection of graph optimization problems.
- 5. Bilevel programming and price setting problems [40R 11/1, Labbé and Violin (2013)]: Martine Labbé and Alessia Violin present the main concepts, models



- and solution methods of pricing optimization problems which can be modeled as bilevel programs.
- 6. Combining metaheuristics with mathematical programming, constraint programming and machine learning [4OR 11/2, Talbi (2013)]: El-Ghazali Talbi gives a rational, categorized view of the field of hybrid metaheuristics, discussing in particular the case of hybridization with mathematical programming and constraint programming.
- 7. Using multi-objective evolutionary algorithms for single-objective optimization [40R 11/3, Segura et al. (2013)]: Carlos Segura, Carlos Coello Coello, Gara Miranda and Coromoto León present the main methods that allow the use of multi-objective schemes for single-objective optimization, and discuss several open topics and some possible paths of future work in this area.
- 8. Global optimization based on local searches [40R 11/4, Locatelli and Schoen (2013)]: Marco Locatelli and Fabio Schoen deal with the use of local searches within global optimization algorithms, and present how the associated issues have been faced in the existing literature.
- Merit functions: a bridge between optimization and equilibria [40R 12/1, Pappalardo et al. (2014)]: Massimo Pappalardo, Giandomenico Mastroeni and Mauro Passacantando review the literature about merit functions for variational inequalities, quasi-variational inequalities and abstract equilibrium problems.
- 10. On scheduling with the non-idling constraint [40R 12/2, Chrétienne (2014)]: Philippe Chrétienne gives an overview of the main results obtained on the complexity of scheduling under the non-idling constraint, i.e, when the jobs assigned to each machine must be processed with no intermediate delay.
- 11. Deriving compact extended formulations via LP-based separation techniques [4OR 12/3 Lancia and Serafini (2014)]: Giuseppe Lancia and Paolo Serafini introduce a unified view of compact extended formulations applied to combinatorial optimization problems.
- 12. Simulation optimization: a review of algorithms and applications [40R 12/4 Amaran et al. (2014)]: Simulation optimization refers to the optimization of an objective function subject to constraints, both of which can be evaluated through a stochastic simulation. Satyajith Amaran, Nick Sahinidis, Bikram Sharda and Scott Bury review some of the diverse applications that have been tackled by these methods and speculate on future directions in the field.

5 Research papers

5.1 Research papers published

Regular papers are the core of the journal. We published 38 such papers in volumes 10–12, giving an average number of 3.17 research papers per issue. For volumes 1–9, we had an average of 2.78. Table 3 details the country of origin of the papers published (using the same convention as above). Belgium, France and Italy account for 42% of all papers.



Table 3 Origin of research papers published (2012–2014)

Country	Number of papers	Percentage (%)
Belgium	7	18.4
France	5	13.2
UK	5	13.2
Italy	4	10.5
Korea	3	7.9
Iran	3	7.9
China	2	5.3
Poland	2	5.3
Portugal	2	5.3
Algeria	1	2.6
Canada	1	2.6
Japan	1	2.6
Qatar	1	2.6
Spain	1	2.6
Total	38	100.0

Table 4 Length in pages of research papers published (2012–2014)

Length	Number of papers	Percentage (%)
$x \le 10$	6	15.8
$11 \le x \le 14$	8	21.1
$15 \le x \le 19$	7	18.4
$20 \le x \le 24$	11	28.9
$25 \le x$	6	15.8
Total	38	100.0

The average length of the research papers published in volumes 10–12 is 17.6 pages with a minimum of 4 pages, a maximum of 34 pages and a median of 18 pages. This is detailed in Table 4. This seems in line with our policy of favoring the publication of short papers, although we do not have a strict rule concerning the maximum length of a research paper.

5.2 Selection of research papers

We give here information on the reviewing process of research papers for which a decision was made between 1 January 2012 and 31 December 2014. Some of these papers have been submitted before 1 January 2012.

Except for few cases of plagiarism that were fortunately detected and a couple of parallel submissions, the reviewing process of the papers was rather smooth. The collaboration between the three editors and the area editors proved effective and efficient.



Table 5 Processing time (in days) of research papers (2012–2014)

Time in days	Number of papers	Percentage (%)
$0 \le x \le 20$	314	62.9
$21 \le x \le 40$	25	5.0
$41 \le x \le 60$	9	1.8
$61 \le x \le 80$	13	2.6
$81 \le x \le 100$	7	1.4
$101 \le x \le 200$	103	20.6
$201 \le x \le 300$	22	4.4
301 ≤ <i>x</i>	6	1.2
Total	499	100.0

5.2.1 Rejection rate

Submissions have been following a regular pace. Between 1 January 2012 and 31 December 2014, 499 decisions concerning research papers were made. This is approximately three times more than in the previous periods: 219 in the years 2009–2011, 136 in the years 2005–2008 and 189 before 31 December 2005.

A total of 35 research papers were accepted, meaning an overall rejection rate of 93 % (85 % in 2009–2011, 79 % in 2006–2008 and 71 % before 31 December 2005). In order to interpret this, rather high, rejection rate one should keep in mind that the editorial policy of the journal, in order to ensure a fast and fair processing of the manuscripts, is to reject all papers needing a major revision. After they have been revised, some of these papers are resubmitted to the journal, in which case they are considered as new submissions.

5.2.2 Time before decision

The mean time between the reception of the paper and the communication of the decision to the authors was 51 days (to be compared with 122, 144 and 142 days for papers with a decision in 2009–2011, 2006–2008 and before 31 December 2005, respectively) with a median of 10 days, a minimum of 0 days and a maximum of 330 days. Information on the reviewing time of research papers is summarized in Table 5.

For the 464 papers that were rejected, the mean time before decision was 48 days (99, 130 and 125 for papers processed in 2009–2011, 2006–2008 and before 31 December 2005, respectively) with a minimum time of 0 days (paper rejected the day it was received) and a maximum time of 330 days.

For the 35 papers that were accepted the average time before decision was 92 days, i.e., 3 months (253, 198 and 183 days for papers processed in 2009–2011, 2006–2008 and before 31 December 2005, respectively) with a minimum of 0 days (corresponding to a paper re-submitted after having been rejected because it needed a major revision) and a maximum of 264 days.



Table 6 Origin and selection of research papers (2012–2014)

Country	Percentage of papers received (%)	Rejection rate (%)	
Europe	18.2	75.8	
Among which BIF ^a	9.2	71.7	
UJTSASAAZ ^b	9.8	93.9	
Rest of the world	72.0	97.2	
Total	100.0	93.0	

^a BIF: Belgium, Italy, France

 Table 7
 Origin of research papers received (2012–2014)

Country	Percentage (%)	Country	Percentage (%)
Iran	23.8	Spain	1.0
India	17.6	Egypt	0.8
China	13.0	Netherlands	0.8
Taiwan	3.8	Saudi Arabia	0.8
Turkey	3.6	United Kingdom	0.8
France	3.2	Australia	0.6
Belgium	3.0	Senegal	0.6
Italy	3.0	Austria	0.4
Pakistan	2.0	Mexico	0.4
Brazil	1.8	Albania	0.2
United States	1.8	Argentina	0.2
Algeria	1.6	Botswana	0.2
Malaysia	1.6	Ghana	0.2
Tunisia	1.6	Greece	0.2
Czech Republic	1.4	Iraq	0.2
Germany	1.4	Ireland	0.2
United Arab Emirates	1.4	Norway	0.2
Canada	1.2	Philippines	0.2
Portugal	1.2	Qatar	0.2
Jordan	1.0	Russia	0.2
Korea	1.0	Serbia	0.2
Poland	1.0	South Africa	0.2
Total			100

5.2.3 Origin of papers

Table 6 summarizes the country of origin of the submissions for which a decision was made between 1 January 2012 and 31 December 2014 (using the same convention as above; Table 7 gives more details).



^b UCJTSASAAZ: USA, Canada, Japan, Taiwan, South America, South Africa, Australia, New Zealand

The fact that the journal is attracting papers from outside the three promoting countries is happily confirmed. It should also be noticed that, within Europe, there is no significant difference between the rejection rate according to the country of origin of the authors: papers coming from Belgium, France or Italy obviously do not receive a special treatment when compared to papers received from other European countries.

A substantial number of papers is received from countries outside Europe and having quite well structured academic systems (mostly from Brazil, Taiwan and the USA). The very high rejection rate observed for those papers perhaps indicate that researchers in these countries prefer to send their best papers to American journals.

Comparing Tables 6 and 7, it is clear that papers coming from outside Europe are mainly coming from countries in which academic institutions are still poorly structured and/or financed. We are sorry to say that, although we received many papers from such countries and in spite of our willingness to help colleagues doing good work under poor conditions, we have only been able to accept very few of these papers.

6 Industry papers

Industry papers consist of case studies, state-of-the-art papers on the applications of OR techniques or considerations on the practice of OR in industry. We published two papers in this section in volumes 10–12 (down from four in volumes 7–9 and six in volumes 4–6): one of them originates from the United States of America and the other one from the United Arab Emirates. Both are 25 pages long. These papers were reviewed like plain research papers.

Unfortunately, the number of industry papers 4OR manages to attract remains small and even decreases.

7 Education papers

Education papers aim at giving an up-to-date exposition of classical OR problems and techniques that are frequently used in OR courses, or casting them in a new light. 4OR publishes very few education papers, and in the period 20122014 we did not publish any education paper.

8 PhD Thesis abstracts

The journal publishes abstracts of PhD theses defended in Belgium, France or Italy, or by Belgian, French or Italian nationals studying abroad. These abstracts are published under the responsibility of the thesis adviser, who is supposed to send an email to the handling editor (Leo Liberti) confirming that the he or she agrees with the abstract. So far, we published all abstracts that satisfy these requirements, although we retain the right to change this in the future.

In the period 2012–2014, we received 29 PhD abstracts, six of which were rejected insofar as they did not satisfy the above requirements. Of the remaining 23, 6 (26 %) come from Italy or are authored by an Italian national abroad, 12 (52 %) come from France, and 4 (17 %) from Belgium.



Acknowledgments We warmly thank once more our board of Associate Editors and all the people that have accepted to referee papers for the journal (the list of referees is published every year at the end of the fourth issue of each volume). Their help has been instrumental in the success of the journal.

References

Altın A, Fortz B, Thorup M, Ümit H (2009) Intra-domain traffic engineering with shortest path routing protocols. 4OR Q J Oper Res 7:301–335

Amaran S, Sahinidis N, Sharda B, Bury S (2014) Simulation optimization: a review of algorithms and applications. 4OR Q J Oper Res 12:301–333

Bennell J, Mesgarpour M, Potts C (2011) Airport runway scheduling. 4OR Q J Oper Res 9:115-138

Bouyssou D, Martello S, Plastria F (2006) A case of plagiarism: Dănuţ Marcu. 4OR 4(1):11-13

Bouyssou D, Martello S, Plastria F (eds) (2007) Surveys in operations research (Invited surveys from 4OR), volume 153 of Annals of Operations Research. Springer, New York

Bouyssou D, Martello S, Plastria F (2009) Plagiarism again: Sreenivas and Srinivas, with an update on Marcu. 4OR 7(1):17–20

Bouyssou D, Martello S, Plastria F (eds) (2010) Surveys in operations research II (Invited surveys from 4OR, 2006–2008), volume 175 of Annals of Operations Research. Springer, New York

Chrétienne P (2014) On scheduling with the non-idling constraint. 4OR Q J Oper Res 12:101–121

Conforti M, Cornuéjols G, Zambelli G (2010) Extended formulations in combinatorial optimization. 4OR Q J Oper Res 8:1–48

D'Ambrosio C, Lodi A (2011) Mixed integer nonlinear programming tools: a practical overview. 4OR Q J Oper Res 9:329–349

Del Pia A, Weismantel R (2012) Relaxations of mixed integer sets from lattice-free polyhedra. 4OR Q J Oper Res 10:221–244

Ferguson C, Marcus A, Oransky I (2014) The peer review scam. Science 515:480–481

Grabisch M (2009) The core of games on ordered structures and graphs. 4OR Q J Oper Res 7:207-238

Gualandi S, Malucelli F (2009) Constraint programming-based column generation. 4OR Q J Oper Res 7:113–137

Hamadi Y, Jabbour S, Saïs L (2012) Learning from conflicts in propositional satisfiability. 4OR Q J Oper Res 10:15–32

Hashimoto H, Yagiura M, Imahori S, Ibaraki T (2010) Recent progress of local search in handling the time window constraints of the vehicle routing problem. 4OR Q J Oper Res 8:221–238

Hvistendahl M (2013) China's publication bazaar. Science 342:1035-1039

Jensen F, Nielsen T (2011) Probabilistic decision graphs for optimization under uncertainty. 4OR Q J Oper Res 9:1–28

Kellerer H, Strusevich VA (2012) The symmetric quadratic knapsack problem: approximation and scheduling applications. 4OR Q J Oper Res 10:111–161

Labbé M, Violin A (2013) Bilevel programming and price setting problems. 4OR Q J Oper Res 11:1–30 Lancia G, Serafini P (2014) Deriving compact extended formulations via LP-based separation techniques. 4OR O J Oper Res 12:201–234

Lee K, Leung J, Pinedo M (2010) Makespan minimization in online scheduling with machine eligibility. 4OR Q J Oper Res 8:331–364

Liberti L, Marchant T, Martello S (2012) No end of the world in 2012 for 4OR. 4OR 10(1):1-13

Liberti L, Marchant T, Martello S (2013a) Eleven surveys in operations research: III. Ann Oper Res 204:3–9 Liberti L, Marchant T, Martello S (eds) (2013b) Surveys in operations research III (Invited surveys from 4OR, 2009–2011), volume 204 of Annals of Operations Research. Springer, New York

Locatelli M, Schoen F (2013) Global optimization based on local searches. 4OR Q J Oper Res 11:301–321 Mahey P (2010) A case of plagiarism: retraction of a paper by Sreenivas and Srinivas. RAIRO Oper Res 44(1):1–3

Pappalardo M, Mastroeni G, Passacantando M (2014) Merit functions: a bridge between optimization and equilibria. 4OR Q J Oper Res 12:1–33

Rendl F (2012) Semidefinite relaxations for partitioning, assignment and ordering problems. 4OR Q J Oper Res 10:321–346

Ricca F, Scozzari A, Simeone B (2011) Political districting: from classical models to recent approaches. 4OR Q J Oper Res 9:223–254



- Scutellà M, Recchia R (2010) Robust portfolio asset allocation and risk measures. 4OR Q J Oper Res 8:113–139
- Segura C, Coello Coello C, Miranda G, León C (2013) Using multi-objective evolutionary algorithms for single-objective optimization. 4OR Q J Oper Res 11:201–228
- Soifer A (2007) The case of Dr. Dănuţ Marcu: serial plagiarism and signing false statements. Geombinatorics XVI(3):293–296
- Talbi EG (2013) Combining metaheuristics with mathematical programming, constraint programming and machine learning. 4OR Q J Oper Res 11:101–150

