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Athanasios Migdalas  
Athanasia Karakitsiou *Editors*

# Optimization, Control, and Applications in the Information Age

In Honor of Panos M. Pardalos's 60th  
Birthday

 Springer

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Athanasios Migdalas • Athanasia Karakitsiou  
Editors

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Ἄνδρα μοι ἔννεπε, μοῦσα, πολύτροπον, ὃς  
μάλα πολλὰ πλάγχθη, ἐπεὶ  
Τροίης ἱερὸν πτολίεθρον ἔπερσεν,  
πολλῶν δ' ἀνθρώπων ἴδεν ἄστεα  
καὶ νόον ἔγνω·

(Ὀμήρου Ὀδύσεια)

Tell me, O Muse, declare to me that man  
Tost to and fro by fate, who, when his arms  
Had laid Troy's holy city in the dust,  
Far wand'ring roam'd on many a tribe of men  
To bend his gaze, their minds and thoughts to learn.

(The Odyssey of Homer,  
Translated by George Musgrave, 1868)

Σὰ βγεῖς στὸν πηγαμὸ γιὰ τὴν Ἰθάκη  
νὰ εὐχέσαι νᾶνα μακρὺς ὁ δρόμος  
γεμάτος περιπέτειες, γεμάτος γνώσεις.  
Τοὺς Λαιστρυγῶνας καὶ τοὺς Κύκλωπας,  
τὸν θυμωμένο Ποσειδῶνα μὴ φοβᾶσαι,  
τέτοια στὸν δρόμο σου ποτὲ σου δὲν θὰ βρεῖς,  
ἂν μὲν ἡ σκέψις σου ὑψηλῆ, ἂν ἐκλεχτὴ  
συγκίνησις τὸ πνεῦμα καὶ τὸ σῶμα σου ἀγγίζει.  
Τοὺς Λαιστρυγῶνας καὶ τοὺς Κύκλωπας,  
τὸν ἄγριο Ποσειδῶνα δὲν θὰ συναντήσεις,  
ἂν δὲν τοὺς κουβαλεῖς μὲς στὴν ψυχὴ σου,  
ἂν ἡ ψυχὴ σου δὲν τοὺς στήνει ἐμπρὸς σου.

Νὰ εὐχέσαι νᾶνα μακρὺς ὁ δρόμος.  
Πολλὰ τὰ καλοκαρινὰ πρωῒνὰ νὰ εἶναι  
πού μὲ τί εὐχαρίστησι, μὲ τί χαρὰ  
θὰ μπαίνεις σὲ λιμένας πρωτοειδομένους·  
νὰ σταματήσεις σ' ἐμπορεῖα Φοινικικὰ,  
καὶ τὲς καλὲς πραγμάτειες ν' ἀποκτήσεις,  
σεντέφια καὶ κοράλλια, κεχριμπάρια κ' ἔβενους,  
καὶ ἡδονικὰ μυρωδικὰ κάθε λογῆς,  
ὅσο μπορεῖς πρὸ ἄφθονα ἡδονικὰ μυρωδικὰ  
σὲ πόλεις Αἰγυπτιακὲς πολλὲς νὰ πᾶς,  
νὰ μάθεις καὶ νὰ μάθεις ἀπ' τοὺς σπουδαγμένους.

Πάντα στὸν νοῦ σου νᾶχεις τὴν Ἰθάκη.  
Τὸ φθάσμον ἔχει εἶν' ὁ προορισμὸς σου.  
Ἄλλὰ μὴ βιάζεις τὸ ταξεῖδι διόλου.  
Καλλίτερα χρόνια πολλὰ νὰ διαρκέσει·  
καὶ γέρος πιά ν' ἀράξεις στὸ νησί,  
πλούσιος μὲ ὅσα κέρδισες στὸν δρόμο,  
μὴ προσδοκῶντας πλοῦτη νὰ σὲ δώσει ἡ Ἰθάκη.

Ἡ Ἰθάκη σ' ἔδωσε τ' ὠραῖο ταξεῖδι.  
Χωρὶς αὐτὴν δὲν ἄβγαίνεις στὸν δρόμο.  
Ἄλλα δὲν ἔχει νὰ σὲ δώσει πιά.

Κι ἂν πτωχικὴ τὴν βρεῖς, ἡ Ἰθάκη δὲν σὲ γέλασε.  
Ἔτσι σοφὸς πού ἔγινες, μὲ τόση πείρα,  
ᾗδη θὰ τὸ κατάλαβες ἡ Ἰθάκας τί σημαίνουν.

(«Ἰθάκη» τοῦ Κωνσταντίνου Π. Καβάφη, 1863-1933)

When you set out on your journey for Ithaka  
pray that the voyage is a long one,  
full of adventure, full of knowledge.  
The Laestrygonians and the Cyclops,  
the angry Poseidon – do not fear of them:  
you'll never find things like that on your path,  
as long as you keep your thoughts high,  
if fine emotions touch your spirit and your body.  
The Laestrygonians and the Cyclops,  
the fierce Poseidon – you won't encounter them  
unless you carry them within your soul,  
unless your soul sets them up in front of you.

Pray that the voyage is a long one.  
That the summer mornings are many, when,  
with such pleasure, with such joy,  
you'll enter ports seen for the first time;  
may you stop at Phoenician markets  
to buy fine merchandise,  
mother of pearl and coral, amber and ebony,  
and sensual perfume of every kind –  
as many sensual perfumes as you can;  
and may you visit many Egyptian cities  
to learn and learn from their scholars.

Always keep Ithaka in your mind.  
Arriving there is your ultimate goal.  
But do not hurry the voyage at all.  
Better if it lasts for many years,  
and to anchor at the island when you are old,  
wealthy with all you have gained on the way,  
not expecting that Ithaka will offer you riches.

Ithaka gave you the marvelous voyage.  
Without her you would not have set out on the road.  
She has nothing left to give you now.

And if you find her poor, Ithaka won't have deceived you.  
Wise as you have become, so full of experience,  
you must have already understood what Ithakas mean.

(“Ithaka” by Constantine P. Cavafis/Kavafis)



Distinguished Professor Panos Pardalos

*With our deepest appreciation, the contributors and the editors, we dedicate this volume to the Distinguished Professor Panos M. Pardalos on the occasion of his 60th birthday.*





# Preface

During June 15–20, 2014, a group of scientists gathered together in a conference on “*Optimization, Control and Applications in the Information Age*” in order to celebrate and honor Panos M. Pardalos on the occasion of his 60th birthday. The meeting took place at the Meliton Hotel of Porto Carras on the middle leg (Sithonia) of the Chalkidiki peninsula in Macedonia, northern Greece, a place of exquisite beauty and one of Panos’s favorite places. The conference was organized by Sergiy Butenko and Athanasios Migdalas and was attended by scientists from all over the world. More than 50 members of this “*Panos’s club*” presented talks during this event.

This volume is dedicated to Panos M. Pardalos, on the occasion of his 60th birthday. The articles collected in this volume are based on selected talks presented during the conference. Several members of the Panos’s club could not attend conference, but have submitted their papers to this volume in order to honor him.

The papers published in this volume cover a wide range of topics and present recent developments and surveys in research fields to which Pardalos has actively contributed and promoted during his career.

In addition, Panos’s spouse, Rosemary Bakker, has written a brief biography describing Panos’s exciting journey from a pastoral village on the high mountains in Thessaly, central Greece, to a Distinguished Professorship at the University of Florida, that is, Panos’s own Odyssey. We therefore dedicate to him the first verses of Homer’s Odyssey and Cavaphes’ poem “Ithaka” believing that they accurately describe Panos’s past, his present, and his future discovery voyages.

We are indebted to Springer publishers and particularly to Razia Amzad for their support in making the publication of this volume possible.

We join our voice with all conference participants, article contributors, and reviewers who made this volume possible in order to wish Panos “Happy Birthday!” and “Chronia Polla!” and in order to express our deepest appreciation to him as a scientist and as a friend.

Luleå, Sweden  
Luleå, Sweden  
February 2015

Athanasios Migdalas  
Athanasia Karakitsiou

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