



MASTERS OF
CONTEMPORARY WATCHMAKING

Thames & Hudson

MICHAEL CLERIZO



30805809

M I C H A E L C L E R I Z O

MASTERS OF
CONTEMPORARY WATCHMAKING

With 672 illustrations, 493 in colour



Thames & Hudson

To Sandra: Never ending love

page 1 *Montre à Tact* by Svend Andersen (see p. 39), with a white gold case 42 mm in diameter and 9.8 mm thick, and blue gold *guilloché* dial with a basket-weave pattern. The side of the case is set with 87 7.5-carat baguette diamonds. Pearled stingray strap. This is the first watch known to have a blue gold dial. While the metal, an alloy of gold and iron, has existed for centuries, jewellers and watchmakers shy away from it because it is extremely brittle. For a dial resilient enough to accept the basket-weave pattern and withstand the rigors of day-to-day wear, Andersen turned to Geneva jeweller and blue gold expert Ludwig Muller. Neither will reveal the secret. The between-the-lugs window allows a surreptitious glance to determine the time, ensuring that the watch lives up to its name.

pages 2–3 *Grand Robusto Chronograph* by Antoine Prezioso (see p. 96) displays his ability to combine diverse visual elements. On the carbon file dial, the colours of the Italian flag, familiar from millions of touristy gewgaws, become an almost subtle background to the exaggerated yellow numerals and yellow hour and minute hands. The date window, at 6 o'clock, is unobtrusive in the overall design but easily readable by the wearer. Also at 6 is a subdial with a chequered flag motif (for counting elapsed minutes), which considering Italy's motor sport heritage fits perfectly with the flag. The subdial at 12 counts chronograph minutes. The centrally mounted hand with the yellow tip at one end and Prezioso's logo at the other counts chronograph seconds. At 3 is a power reserve indicator. The subdial at 9 displays continuous seconds; on the same dial the numerals 28,800 and the letters APH (for *alternance par heure*) refer to the number of beats the balance wheel makes each hour.

right Caliber I wristwatch movement by Marco Lang of Dresden (see pp. 178–79). Finished in the style of a pocket watch from the 18th- and 19th-century heyday of the city's watchmaking, with gilded brass plates and bridges and blued steel screws. The swirling lines on the large wheel are known as a double snailing finish.



First published in the United Kingdom in 2009 by
Thames & Hudson Ltd, 181A High Holborn,
London WC1V 7QX

thamesandhudson.com

Copyright © 2009 Michael Clerizo

All Rights Reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording or any other information storage and retrieval system, without prior permission in writing from the publisher.

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the
British Library

ISBN 978-0-500-51485-6

Printed and bound in Singapore by CS Graphics

Roger SMITH 212

Vianney HALTER 192

Marco LANG 172

Alain SILBERSTEIN 152

Aniceto JIMÉNEZ PITA 132

Franck MULLER 112

12

George DANIELS

32

Svend ANDERSEN

52

Vincent CALABRESE

72

Philippe DUFOUR

92

Antoine PREZIUSO

232 *Other* MASTER WATCHMAKERS

284 AFTERWORD

286 GLOSSARY

287 FURTHER READING

288 SOURCES AND RESOURCES

291 PICTURE CREDITS

292 INDEX

CONTENTS







30805809

M I C H A E L C L E R I Z O

MASTERS OF CONTEMPORARY WATCHMAKING

With 672 illustrations, 493 in colour



Thames & Hudson

To Sandra: Never ending love

page 1 *Montre à Tact* by Svend Andersen (see p. 39), with a white gold case 42 mm in diameter and 9.8 mm thick, and blue gold *guilloché* dial with a basket-weave pattern. The side of the case is set with 87 7.5-carat baguette diamonds. Pearled stingray strap. This is the first watch known to have a blue gold dial. While the metal, an alloy of gold and iron, has existed for centuries, jewellers and watchmakers shy away from it because it is extremely brittle. For a dial resilient enough to accept the basket-weave pattern and withstand the rigors of day-to-day wear, Andersen turned to Geneva jeweller and blue gold expert Ludwig Muller. Neither will reveal the secret. The between-the-lugs window allows a surreptitious glance to determine the time, ensuring that the watch lives up to its name.

pages 2–3 *Grand Robusto Chronograph* by Antoine Prezioso (see p. 96) displays his ability to combine diverse visual elements. On the carbon file dial, the colours of the Italian flag, familiar from millions of touristy gewgaws, become an almost subtle background to the exaggerated yellow numerals and yellow hour and minute hands. The date window, at 6 o'clock, is unobtrusive in the overall design but easily readable by the wearer. Also at 6 is a subdial with a chequered flag motif (for counting elapsed minutes), which considering Italy's motor sport heritage fits perfectly with the flag. The subdial at 12 counts chronograph minutes. The centrally mounted hand with the yellow tip at one end and Prezioso's logo at the other counts chronograph seconds. At 3 is a power reserve indicator. The subdial at 9 displays continuous seconds; on the same dial the numerals 28,800 and the letters APH (for *alternance par heure*) refer to the number of beats the balance wheel makes each hour.

right Caliber I wristwatch movement by Marco Lang of Dresden (see pp. 178–79). Finished in the style of a pocket watch from the 18th- and 19th-century heyday of the city's watchmaking, with gilded brass plates and bridges and blued steel screws. The swirling lines on the large wheel are known as a double snailing finish.



First published in the United Kingdom in 2009 by
Thames & Hudson Ltd, 181A High Holborn,
London WC1V 7QX

thamesandhudson.com

Copyright © 2009 Michael Clerizo

All Rights Reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording or any other information storage and retrieval system, without prior permission in writing from the publisher.

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the
British Library

ISBN 978-0-500-51485-6

Printed and bound in Singapore by CS Graphics

Roger SMITH 212

Vianney HALTER 192

Marco LANG 172

Alain SILBERSTEIN 152

Aniceto JIMÉNEZ PITA 132

Franck MULLER 112

12

George DANIELS

32

Svend ANDERSEN

52

Vincent CALABRESE

72

Philippe DUFOUR

92

Antoine PREZIUSO

232 *Other* MASTER WATCHMAKERS

284 AFTERWORD

286 GLOSSARY

287 FURTHER READING

288 SOURCES AND RESOURCES

291 PICTURE CREDITS

292 INDEX

CONTENTS

ACKNOWLEDGMENTS

First, I offer a grateful thank you to the eleven men featured in this book. All gave unstintingly of their time during interviews that often started with breakfast and ended long after dinner. They also patiently endured innumerable follow-up phone calls and emails and requests for images. Additional thanks to George Daniels for allowing me to use the definitions of some horological terms which appeared in his book, *The Art of Breguet*. Thanks are also due to the people who work with the watchmakers in this book and who helped arrange interviews, supplied much needed information, and sometimes provided translation services: Tina Calabrese, Carole Cheneval, Dominique Donzè, Franck-Eric Flegbo, Paola Giovanettoni, Daniel Jiménez Pita, Andy Jones, Philippe Mariez, Yuliana Ramirez, Mark Schmidt, Sylvie Silberstein and Michael Zölfel.

I want to thank Marie Picon, the editor of *InSync Magazine*, and Glen B. Bowen, the publisher, for allowing me to use sections of articles I wrote for that magazine in the chapters on George Daniels, Alain Silberstein and Roger Smith.

Gratitude is also due to Curtis D. Thomson of www.tempered-online.com and Ian Skellern, an astute Australian now resident in the Alpine Republic. From both men advice was frequently asked for and always freely given. Gary Girdvainis of *International Watch Magazine* proved to be another source of valuable advice.

At Thames & Hudson I wish to say thank you to Jamie Camplin for commissioning the book and Aaron Hayden for a design that possesses a beauty equal to the book's subject. I am also grateful to Susanna Friedman who patiently explained to me the meaning of the term 'colour correction'. All writers know that eventually whatever you write will have to leave home like a beloved child and go out into the wider world. I am grateful that the first encounter for my offspring was my editor, the supportive and encouraging Emily Lane.

The biggest thank you imaginable is for my wife, Sandra. Without her not a word of this book would have been written.



above *Tourbillon Papaya* by Alain Silberstein (see pp. 158–59).

opposite *Sol y Luna* by Aniceto Jiménez Pita (see pp. 138–39).

INTRODUCTION



This is a book about people. Specifically, ten watchmakers and one watch architect. These eleven individuals contributed, mightily, to the revival of the profession of independent master watchmaker, which faced extinction during the last half of the 20th century.

The first attribute of a master watchmaker is supreme dominion over the craft of mechanical watchmaking. That means knowing the purpose of each of the many components in a watch, while possessing an intimate understanding of how each component is produced, the physical properties of the materials used to fabricate them, how they are subsequently assembled into a functioning watch, and the laws of physics, mathematics and geometry that govern their performance.

The second attribute is the ability to design and build a watch that is more than the sum of its functions. A watch is a small thing, yet as produced by some it may possess great beauty, entertain and educate, display a sense of humour, irony or history, provide social commentary, and even express the nobility of the human spirit and the grandeur of human dreams.

The final attribute concerns independence, a capacity to work alone or with only a few assistants. Partly, independence is about the mundane wish to be your own boss. More importantly, it is about wanting to use your skills solely in the service of your own creative urges rather than the demands of a corporation or the whims of consumers. Independence is also about a belief that someone exists somewhere who will appreciate you and what you have done, someone happy to buy the watch you have sweated over for months, twelve or fourteen

hours a day – the watch that when you heard its first tick-tock and gazed at the first sweep of its hands caused you to leap from your workbench with tears in your eyes.

I wrote this book to record the struggles and successes in the lives and work of eleven people. In each chapter certain themes recur. Most prominently, the answer to the question: Why and how did you become a watchmaker? followed by How did you develop your style? The other common motifs are the role of restoration in a watchmaker's career, whether he buys-in or produces his own components, and his approach to 'finish' – the amount and type of decoration applied to components before they are sequestered inside a watchcase. These themes are present because I discovered they are matters watchmakers want to talk about.

Another favourite topic for watchmakers is what in English we call the quartz revolution and in French is known as *la Crise*, the Crisis. In the mid-1970s the inexpensive, machine-made quartz watch devastated the mechanical watch industry. In Switzerland tens of thousands lost their jobs, companies closed, and five-hundred-year-old skills were in danger of vanishing. Some of the watchmakers in this book took it personally. They engaged the seemingly all-conquering quartz watch in hand-to-hand combat and won. In French, the fight back is called *la renaissance de la montre mécanique*, the renaissance of the mechanical watch. Some of the watchmakers in this book proudly bear their scars from that conflict.

As for the much mulled-over question: Is the watchmaker an artist and the watch a work of art? Many different answers were offered and

are recorded in the book not for the purpose of proclaiming a definitive answer but to provide a spark for further discussion.

There are a few things this book is not. It is not a technical manual on watchmaking, even though technical terms appear frequently. These terms are explained as they occur and in the Glossary (pp. 286–87).

However, three terms deserve early mention: the movement, the escapement, and complications. To understand the movement it is best to begin with a comment often repeated by watchmakers: 'A mechanical watch is a living thing.' Like all living things the watch has a body, and the body has an anatomy. The 'movement' constitutes the skeleton, the vital internal organs,

the sinews and muscles of a mechanical watch: a painstakingly designed and constructed framework of plates, wheels, gears, pivots, pinions, springs and screws, the components of the movement must function in perfect unison for the watch to perform accurately. The 'escapement' is the heart of a mechanical watch. It controls the flow of energy in the watch the way the heart controls the flow of blood in the human body. Place your ear near someone's chest and you can hear a heart beat. Hold a watch to your ear and the tick-tock you hear is the escapement at work. (Staying with the analogy, the case is the skin of a watch, and the dial is the face and the hands.) The third term is 'complication'. On a watch, a complication is any

The *Grande et Petite Sonnerie et Répétition Minutes* wristwatch by Philippe Dufour (see pp. 84–85). Side view of the white gold case showing the crown and buttons for controlling the strike mechanisms. Also visible is the enamel dial. The button on the crown activates the minute repeating mechanism, chiming the hours, quarter hours and minutes on demand. To the left of the crown is a slide that allows the wearer to select the mode – *grande sonnerie* or *petite sonnerie*. Both strike the hour on the hour; but on the quarter hour *grande sonnerie* (HQ) strikes both hour and quarter hour, while *petite sonnerie* (QO) strikes only the quarter hour. The slide to the right of the crown sets the mechanisms to silent (SI) or strike (ST).



function other than the basic one of telling the time of day. Complications range from additional timekeeping functions, such as second time zones, to calendars and moon phases, to stopwatch functions, to chimes, to thermometers, to devices that show how much time will elapse before a watch requires winding, and many more.

When dealing with complicated mechanisms I have used the terminology the watchmakers recommended. Usually that means explaining what a device does as opposed to detailing how it does what it does. I readily abandoned this practice whenever a technical matter proved of overwhelming importance to a watchmaker.

This book is also not a catalogue, a complete listing of every watch a watchmaker has designed or produced. I believe much more is learned by thoroughly discussing a few watches.

Up-to-date price information is available on the internet or at the end of a phone. Only some auction prices are mentioned because they help to make a point about the demand for a watchmaker's work.

For anyone who has come this far and decided to go further, I hope you will find that I have done all eleven watchmakers justice and that reading their stories proves as fascinating for you as hearing them was for me.



The wide range of contemporary watchmaking.

left The second *Space Travellers' Watch* by George Daniels (see p. 18).

opposite *Trio Petite Seconde et Date* by Vianney Halter (see p. 208).







left George Daniels in his Isle of Man workshop, with one of his *Millennium* wristwatches displayed on his right wrist as he works. (Daniels often wears three watches – one on each wrist, and a pocket watch.)

below A bronze bust of George Daniels by his friend and admirer Eduardo Paolozzi. The artist was sure to include Daniels' watch.





George DANIELS

In his family's tiny flat over a clothes shop in North London George Daniels, five years old, with thick brown hair and piercing blue eyes, was surprised to discover a pocket watch. Neither his abusive, alcoholic father nor his uncaring mother owned one.

'It was in 1931. We were desperately poor. I mean we were really scruffy gutter kids. There were eleven of us and we had nothing to eat. By the age of four I learned how to investigate the delivery alleys behind shops. If you are a fruiterer and you drop an apple it will bruise so you can't sell it, so you throw it out. I used to eat those. An apple with a bruise is as good as an apple without a bruise. There was never anything of value in the flat. That was why the watch intrigued me.' Overwhelmed by curiosity, Daniels prised open the watch. 'The movement was broken but still I was fascinated by it. I could see how all the components fit together but nothing was moving. I wanted to see a working movement. The first chance I got, I opened the back of the alarm clock my parents kept on the mantel. I wrote about the alarm clock in my autobiography.'

At eighty-two, George Daniels MBE eases out of his chair and crosses the cavernous drawing room of his mansion on the Isle of Man. Outside, acres of garden slope towards the town of Ramsey and the Irish Sea. Converted stables house part of his vintage car and motorcycle collections; the rest is in a barn on his estate in Herefordshire. Just beyond the garage lies his watchmaking workshop – purpose-built, extensively equipped, and the size of a bungalow.

In the drawing room antique French furniture mixes amiably with a television, the engine and carriages of a 1950s train set, and clocks by venerated English makers. Perched on top of a cabinet is a bronze bust of Daniels by Eduardo Paolozzi, done in 1997. 'He did the bust out of friendship to me. He was an admirer of my watches. He called them an advanced form of artistry. We used to go around the cafés of London together in the sixties. He would sing and I would play the mouth organ. He had an excellent voice. I started playing the mouth organ when I was twelve. Other patrons enjoyed our little concerts.'

On a polished table stand the four books Daniels has written, and the four he co-authored. He retrieves his autobiography, *'All In Good Time' – Reflections of a Watchmaker*, and returns to his chair. Along with the usual afflictions of age Daniels has endured tuberculosis of the bladder and kidneys, spinal surgery, a mild stroke, and two double bypass operations (the first one failed). A battle with throat cancer left him with a permanently hoarse voice. But he retains a nearly full head of grey hair and his blue eyes are lively and bright.

Finding the right page, he starts to read: 'I knew that clocks needed winding, and now I could see the spring and its workings. The fascination of the movement was the orderliness of its function. No luck or judgment was needed, as with most other things in life. Every component had a function, which it passed on to each succeeding component in a chain of actions. It was preordained, certain and precise. It started with the mainspring and terminated at the balance wheel, oscillating in gently ticking majesty as the hairspring dialled and contracted in tranquil harmony. Part of its fascination for me was its complete independence from outside assistance. It needed no batteries or plugging in, it was self-contained and made no demands. I couldn't have expressed it at the time, but it exactly echoed my own philosophy and made a great impression on me.'

He closes the book and continues: 'After my experience with the alarm clock there was another incident, with a woman named Sybil. She helped Mr Ashley, who ran a shop downstairs selling

'I knew that clocks needed winding, and now I could see the spring and its workings.

The fascination of the movement was the orderliness of its function.

No luck or judgment was needed, as with most other things in life.

Every component had a function, which it passed on to each

succeeding component in a chain of actions.'