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*Editors*

# Time Perspective Theory; Review, Research and Application

Essays in Honor of Philip G. Zimbardo

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*To Phil Zimbardo,  
our Teacher, our Mentor, our Friend*

*To all authors,  
who promptly replied to our many requests  
and patiently waited for ours*

*To our families and friends,  
who supported and encouraged us  
during this huge but exciting project*

*To our colleagues  
from the TP international network and beyond*

*May the time be on your side!*

Maciej, Nicolas, & Wessel

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# Editors

**Maciej Stolarski** is currently an Assistant Professor at Faculty of Psychology, University of Warsaw, Poland, where he earned his MA and PhD degrees, both awarded with *summa cum laude* distinction. His scientific interests are very broad, including mutual influences between cognition and emotion, individual differences in temperament, IQ, and emotional intelligence, as well as analyses of aggregate psychological features of nations. He published in renowned peer-reviewed journals, including *Intelligence*, *Personality and Individual Differences*, *Journal of Happiness Studies*, and *PLOS One*, among others. His interest in Time Perspective phenomenon, as well as his collaboration with Phil Zimbardo began in 2010, after Phil's visit at University of Warsaw. Since that time Maciej conducted numerous studies investigating TP, mainly in its relation to emotional processes. He developed and validated the DBTP, an indicator of temporal balance, increasingly used in empirical research. Currently he conducts a research program investigating genetic, familial, and cultural bases of TP.

**Nicolas Fioulaine** is an Associate Professor of Social Psychology at the Institute of Psychology at the University of Lyon, France. He earned his BA, MA, and PhD from Provence University and works with Phil Zimbardo since 7 years to develop and structure time perspective research worldwide. He was awarded with several research grants for applied studies, and is the program director of the Master of Applied Social Psychology at the University of Lyon. His earliest research interests dealt with psychological correlates of socioeconomic precariousness which he studied using quantitative and qualitative methods. His findings rapidly bring him to be interested in the social roots and psychological implications of time perspective, mainly in the fields of inequalities related to health and access to rights. He is also interested in applying psychology to social issues through action-research, field experiments, or professional training. He is currently studying the role of psychological field properties on people's experiences, decisions, and behaviors.

**Wessel van Beek** studied clinical psychology at the University of Utrecht, the Netherlands, and earned his PhD from the Vrije Universiteit in Amsterdam. He has been working in clinical psychology and psychiatry for 20 years. Beside his work as a psychotherapist Wessel did research on the role of time perspective and Future thinking in suicidality, and he developed the Future Oriented Group Training for suicidal patients. As a clinician Wessel has special interest in how past, present, and future thinking are related and how they influence psychopathology. Wessel has been part of a core group of researchers working with Phil Zimbardo. He currently focuses on Prenatal Past, as a complementary time perspective, and is preparing a book on Time in Psychotherapy. Wessel is director of a small mental health care institute in The Netherlands.

# Time Perspective Theory: The Introduction

Maciej Stolarski, Nicolas Fieulaine, and Wessel van Beek

In his numerous spirited lectures on Time Perspective, Professor Philip G. Zimbardo has often emphasized that time perspective remains one of the most powerful influences on human behavior (e.g., Zimbardo 2012). Quite an unusual claim, taking into account that it has been formulated by one of the most radical situationists (Zimbardo 2004) in contemporary psychology, with respect to construct which has a lot to do with individual differences. Since his early works on hypnotically induced focus on a particular time horizon (past, present or future Zimbardo et al. 1971; see also “Foreword” by Maslach, this volume), Zimbardo, has made an impressive contribution to psychology of time. His dissemination of Time Perspective Theory was initially presented to an enthusiastic group of young researchers, gathered originally through a seminar led at Moscow State University by Anna Sircova, and progressively structured into an International Research Network (see <http://www.timeperspective.net>) composed of more than 150 members from more than 40 countries. Dozens of articles published in high-impact, peer-reviewed journals confirmed the robustness of impact that Time Perspective Theory made on contemporary psychology. The impact that was perhaps most clearly visible was evident during the 1st International Conference on Time Perspective which took place in September 2012 in Coimbra, Portugal, with hundreds of

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researchers from all around the world, presenting their research and discussing the nature and role of psychological time, as well as prominent keynotes, most of whom could be found among the authors of this book (Chapters “[The Motivational Properties of Future Time Perspective Future Orientation: Different Approaches, Different Cultures](#)” by Seginer and Lens; “[Learning and Future Time Perspective: The Promise of the Future – Rewarding in the Present](#)” by Husman et al.; “[Time Perspective Therapy: Transforming Zimbardo’s Temporal Theory into Clinical Practice](#)” by Sword et al.; “[Afterword](#)” by Zimbardo; all in this volume).

We have decided to elaborate the present book for two equally important reasons: one personal and one scientific. First, to honor Professor Zimbardo, who celebrated his 80th birthday anniversary in March, 2013. Taking into account his outstanding contribution to both scientific psychology (from Stanford Prison Experiment to Time Perspective Theory) and practical psychology (from Shyness clinic to Heroic Imagination Project) this book summarizing his most recent area of research seemed natural and adequate for us, especially given that Phil Zimbardo has been a mentor, a friend, and an authority in our scientific careers. We all studied his classic handbook (Zimbardo 1992), we were all impressed and terrified with the results of the Prison Experiment (Haney et al. 1973), and we all anchored our research efforts and passion in Time Perspective Theory (Zimbardo and Boyd 1999, 2008). Our experience with Time Perspective theory and research led us to the conclusion that this area of temporal psychology definitely needs a holistic scientific review of the present state of art. Putting all the wonderful authors together, working with the most prominent authors in the field, as well as with young, albeit already experienced scientists, and developing our own research programs, has been a wonderful adventure for us, both at professional and personal level.

## The Origins

Where in time do we start when giving an overview of the place of Zimbardo’s Time Perspective Theory in social sciences? In this very limited overview we present some of the major publicists and researchers in the field of time science. We leave many people out, both from earlier times, and living in the very present.

Thinking about time is related to our frame of reference. Raju (2003) states it clearly: “time is where science meets religion. The interaction between science and culture is mediated by time beliefs”. The presence or absence of God is one aspect we need to consider when we think about time (see chapter “[Time Perspective and Transcendental Future Thinking](#)” by van Beek and Kairys, this volume). The role of the interaction between mysticism or religion and time is clear when we regard time-telling artifacts, like Stonehenge, the Aztec calendar, and the Antikythera Mechanism. “We need to realize that these are not merely creations of the mind, but creations for the shaping of thought” (Birth 2013). We measure our time, the length of our lives, and try to relate our limited mortal presence to the infiniteness of God or eternity. Therefore, thinking about time and temporality might be as old as man is. In his ‘Encyclopedia of Time’ Birx (2009) mentions the ancient Greek Heraclitus,

who proposed that the cosmos is endlessly changing, manifesting ongoing cyclical patterns, as one of the forefathers. After that, Plotinus and Saint Augustine were important contributors in this field.

In modern times we need to mention ‘Being and Time’ (1927/1996), by Martin Heidegger, a widely cited masterwork. But Heidegger’s work ‘On Time and Being’ (1969/1972), in which he introduces the temporal character of Being itself, might be considered even more influential on his successors like Kurt Lewin. Heidegger was both personally and intellectually influenced by Edmund Husserl and his phenomenology. “If time finds its meaning in eternity, then it must be understood starting from eternity”, as Heidegger (1927) pointed out.

In 1890, William James introduced a chapter on “The perception of Time” in his famous book “The Principles of psychology”, and became one of the first researchers discussing the perception of time duration and the passage of time as a core concept in psychology. When stating that “*The knowledge of some other part of the stream, past or future, near or remote, is always mixed in with our knowledge of the present thing*” (p. 607) and that “*There is thus a sort of perspective projection of past objects upon present consciousness, similar to that of wide landscapes upon a camera-screen*” (p. 631), James introduced the foundations of conceptions that would become the time perspective theory, but also the concept itself (“*In hashish-intoxication there is a curious increase in the apparent time-perspective*”, p. 631). At the same time, Henri Bergson in his thesis, “*Essai sur les données immédiates de la conscience*” (1889), discusses time as intuition of duration, felt through the stream of consciousness led by “*élan vital*” and stood internally in reference to the immediate experience. Subjective time is conceived by Bergson as a spatial degradation of “pure” time achieved by a symbolic representation constituted by the past, consisting of memory, and the future formed by expectations. In 1908, McTaggart also underlined the profound paradoxical status of time, in his “Unreality of time” paper, proposing a stimulating distinction between past/present and earlier/later positions in time (McTaggart 1908).

Other earlier psychologists studied the psychogenesis of time sense. The aim was to determine how time sensitivity is established in human psychology and to empirically explore the genesis of the idea of time (the earliest work in this perspective are those of Wundt 1897 and Guyau 1890). But the first and among the most disruptive exploration of the genesis and functioning of time in psychology is without any doubt the “psychology of time” published by Paul Fraisse in 1957. From an extensive review of psychological studies on time, he proposed a general model of the development of the sense and idea of time and tried to address the following question: If humans cannot objectively *perceive* the present, what perception of time is? “*Time of things or duration of me? Duration from sensations, or duration from of our mind?*” (p. 79). Drawing from Gestalt Theory, he proposed that time perception comes from a “*bridge*” between the past, the present and the immediate future induced by the duration of perception. Then, “*as soon as we fix our attention, organization appears (...), distinguishing objects, isolating successive structures, which therefore are figures*” (p. 84). From this perception develops a “*time horizon, consisting of past and future time perspectives*” (p. 147), which then founded the abstract notion of time. This abstract notion is profoundly rooted in cultural and

historical contexts, and a large body of research developed to explore and understand how societies create and maintain a specific relation to time (from the earliest studies of religious time by Hubert and Mauss 1905 or Durkheim in 1912, to the most recent works by Barbara Adams, e.g. Adams 1990).

But Time Perspective Theory finds its foundation in Kurt Lewin's work on time and future thinking. In his life-space model Lewin proposed to concentrate on 'what is' in the present. This includes the psychological past and the psychological future. He pinpoints the role of expectations, which tend to be 'affected by perception on the one hand and memory on the other' (Lewin 1943), and which affect current actions and emotions. His "*Time perspective and morale*" publication in 1942 is considered as the original reference for Time Perspective Theory, even if some authors also refer to the article by L.K. Franck in 1939. Hulett (1944), at the same period, published an influential article on Time Perspective and the Social Role, where he first emphasized the importance of cultural influences on time perspective.

But the contemporary research on time perspective was profoundly influenced by the publication of "*Future Time Perspective and Motivation*" by Joseph Nuttin and Willy Lens in 1980. Nuttin & Lens focused on the importance of future thinking as our primary motivational force. According to Nuttin we are driven by who we want to become. Our behavior is highly motivated by our thoughts about the future, or more precisely: "*the aggregate temporal distance to a person's self-listed goals*" (Nuttin and Lens 1985; see also Seginer 2009). One of us has in his hands the Phil Zimbardo's English copy of the Nuttin and Lens book. And annotations in the margins, dated 1985 (the year of Zimbardo's first publication on time perspective, Gonzales and Zimbardo 1985) are a testimony of the influence of this book on the future developments of time perspective theory and of the Zimbardo Time Perspective Inventory (Fig. 1).

To end with this short history of time psychology research, we have to mention three important contributions in the field, that have more or less influenced Phil Zimbardo's conception of time. First, the review "*Time and human interaction: Toward a social psychology of time*" by McGrath and Kelly (1986), a milestone in time perspective research and continues to illuminate students and academics in their studies and courses. J.T. Fraser, founder of the International Society for the Study of Time (ISST) also authored a famous series "*Time studies*" presenting interdisciplinary studies on time (see also Fraser 1989). Last, *but far from being the least*, there is one person that was also influential in Zimbardo's Time perspective Theory, namely Robert Levine. To use Phil's words, Levine wrote "the most fascinating book on time perspective." In "*A geography of Time*", Levine (1998) recounts his experiences as professor traveling through very different conceptions of time all over the world. Not only engaging and spirited, this book is the source of a great part of our actual knowledge of intercultural differences in time conceptions.

From this diverse background, the very performance of Phil Zimbardo and John Boyd was to develop an integrative approach, and to provide psychologists with a valid and reliable individual difference measure of time perspective. The 1999 paper in the "*Journal of Personality and Social Psychology*" was not only the presentation of a measure, but also a research program, and a call for re-launching research on

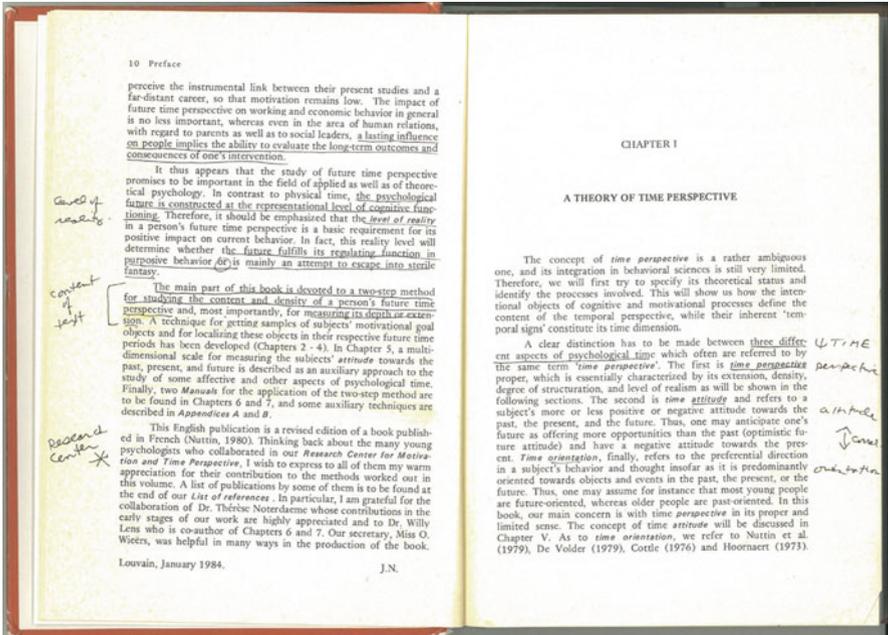


Fig. 1 Phil's annotated version of Nuttin and Lens book on time perspective and motivation

time perspective. Phil and John then stated: "It is our hope that, as more researchers adopt the ZTPI as a measure of time perspective that is easy to administer and score, the empirical base of time perspective will be cumulatively solidified and its theoretical net stretched far and wide" (Zimbardo and Boyd 1999, p. 1284). It seems that their expectations are being met, and even beyond, due to Phil's power of conviction, and his mentoring role for a group of young scientist at different points around the globe. More basically, time perspective research was largely jeopardized by the heterogeneity of measures and definition, and thanks to the ZTPI's utility researchers were able to cumulate and compare findings, to collaborate and to build a scientific community all around the world.

### *The Time Perspective Network*

Most of the contributors to this book were contacted on the behalf of the International Research Network on Time Perspective. Founded by Anna Sircova in 2007, this International Research Network gathered all the persons around the world interested in using, translating and validating the ZTPI. Originally established to facilitate the coordination of ZTPI translations, this research network became progressively a scientific community dedicated to the development and dissemination of Time

Perspective research. Started when Phil Zimbardo visited Anna Sircova and her colleagues during the ‘Time Perspective and Well-Being’ seminar, the network grew up under the coordination of Anna Sircova and Nicolas Fieulaine (who published a joint paper with Phil Zimbardo in 2007), rapidly joined by colleagues from all over the world (Martina Klicperova-Baker, Juan Francisco Diaz-Morales, Antanas Kayris, Taciano Lemos Milfont, Victor Cabrita, and Altinay Kislali were the pioneers). The first official meeting of the group was organized in July 2008 in Berlin (the 29th International Congress of Psychology), and the first website was launched just after that time by Wessel van Beek. Plans were then made with Taciano Milfont to publish an international article about the ZTPI and Anna Sircova launched and coordinated the cross-cultural project with Nicolas Fieulaine and Altinay Kislali. Most of the group members met again in Oslo 2009, where several researchers presented their latest findings in symposia organized by Nicolas Fieulaine and Taciano Milfont. Since then, and until now, the network organized 12 international symposia at 5 international conferences, published a journal article, co-signed by members from more than 25 countries presenting the cross-cultural validation of the ZTPI (Sircova et al. 2014), and at this time, 199 members are subscribers to the mailing list. Since 1999, the ZTPI was translated and validated in almost 45 countries, and more than 15 validation studies were published.

A milestone was the organization, in September 2012, of the first International Conference on Time Perspective (ICTP) by Victor Ortuño and his colleagues in Coimbra, Portugal, where 278 participants from 44 countries met each other in person. At this occasion, the editors presented the project of a book, the one you have in your hands now, Maciej Stolarski presented his plans to organize the second ICTP in Warsaw in July 2014, and Tomasz Rowiński announced a new website (see <http://www.timeperspective.net/>). Without this networking activity, animated by only a few persons under the caring and steady lead of Phil Zimbardo, this book, as the two ICTP, would be almost impossible, and it is our hope that the network will continue growing and find new ways and means to kindle warm relations, strong collaborations and diverse and innovative research on time perspective.

## **The Time Perspective Theory**

Despite of the catchy character of Time Perspective Theory, especially in its simplified popular version ascribing individuals to particular “types” (e.g., “Present Hedonists”), it is actually not so easy to properly understand what time perspective really is. Zimbardo and Boyd (1999) define it as “the often nonconscious process whereby the continual flows of personal and social experiences are assigned to temporal categories, or time frames, that help to give order, coherence, and meaning to those events” (Zimbardo and Boyd 1999, p. 1271). The definition may sound a bit vague, as the “process” is definitely not intuitive (presumably because it is “often unconscious”, thus we are less aware of it than, compared to our understanding of primary personality traits). In fact time perspective has a lot to do with cognitive

processes. Before Kahneman (1973) emphasized a limitedness of our mental resources (particularly attention, but understood broadly, as a sort of “mental energy”), pointing out that they are continually “invested” into different activities, sources of information, or control processes. Thus, at one moment, only a tiny part of information is selected (Hunt and Lansman 1986), and becomes part of our conscious experience. Our past, present, and future permanently “fight” for resources, because focus on one of them usually pushes the remaining two outside of our field of attention.<sup>1</sup> In other words, if one becomes focused on her or his future, they will probably ignore their past, and leave only a small part of cognitive resources to control their present situation. Similarly, concentration on the present will reduce resources available for eventual considering future consequences of present behavior, and so on. Such momentary focus may have robust consequences for one’s actual behavior (e.g., see studies reported by Maslach, as well as “[Time and the Misfits: Temporal Framing and Priming in Persuasive Communications](#)” by Martinez and Fieulaine, both in this volume). Naturally, albeit attention is often directed by properties of stimuli, it remains a subject of one’s intentional control, thus we may choose to which time frame we want to refer to in a particular situation, for instance focusing our attention on considering possible future consequences of present behaviors.

Despite this central processing character of time perspective, through numerous learning processes (e.g., familial modeling, peer interactions, cultural influences etc.) individuals come to develop an habitual focus on one or more time zones and, as a consequence, tend to ignore the remaining ones. For example, training in gratification delay will probably enhance future focus and, to some degree, reduce Present-Hedonistic strivings. This habitual focus becomes so consolidated that it may be treated in a way similar to personality traits, or response styles. Zimbardo and Boyd (1999) distinguished five dimensions that can be used to describe one’s time perspective, independently from the existence of the three natural time horizons (i.e., past, present, and future). Individuals may regard to each of them in different ways. For instance, a view of past may be positive, warm and nostalgic, as well as negative, full of regrets and traumas. What is worth emphasizing, these two ways of relating towards one’s past are very weakly related (Zimbardo and Boyd 1999), thus an individual may reveal either a habitual focus on one of them, on both, or on neither. Analogically, one may perceive both present and future in different ways (see Table 1).

Moreover, numerous investigators of time perspective put a strong emphasis on a construct labeled Balanced Time Perspective (BTP, see chapter “[Assessing Temporal Harmony: The Issue of a Balanced Time Perspective](#)” by Stolarski et al., this volume). Balanced Time Perspective, understood as the optimal mix of time perspective, allowing an individual to optimize his or her functioning through flexible switching between adaptive views of each time zone, this remains a core of the Time Perspective theory (Boniwell and Zimbardo 2004).

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<sup>1</sup>In some specific situations several temporal categories may coexist in consciousness; such situations usually regard meta-cognitive experiences of comparing two time zones, e.g., revising future plans under the influence of present events or reflections on recollections of own past.

**Table 1** Time Perspectives distinguished by Zimbardo and Boyd (1999) in their Time Perspective Theory, and dimensions described in its extensions (Boyd and Zimbardo 1997; Carelli et al. 2011; Zimbardo et al. 2012)

Time perspective	Description	Sample correlates
Past-Negative (PN)	Relates to a generally negative, aversive view of the past, which may emerge as a result of actual experience of unpleasant or traumatic events, of a negative reconstruction of benign events, or of a mixture of both	Depression, aggression, low emotional stability, low self-esteem, trait anxiety
Past Positive (PP)	Reflects a warm, sentimental attitude toward the past	Friendliness, high self-esteem, low anxiety
Present-Hedonistic (PH)	Relates to a hedonistic, risk-taking and pleasure-oriented attitude towards life, with high impulsivity and little concern for future consequences of one's actions	Novelty and sensation seeking, low impulse control
Present-Fatalistic (PF)	“reveals a belief that the future is predestined and uninfluenced by individual action, whereas the present must be borne with resignation because humans are at the whimsical mercy of “fate”” (Zimbardo and Boyd 1999, p. 1278)	Depression, low consideration for future consequences, external locus of control
Future (F)	Relates to a general future orientation, with behavior dominated by striving for future goals and rewards	Conscientiousness, Consideration for future consequences
Future Transcendental (FT) <sup>a</sup>	Extends from the point of imagined death of the physical body to infinity; from this perspective behaviors often seen as irrational, such as suicide, extreme heroism, and excessive tithing, are transformed into rational behaviors expected to lead to fulfillment of transcendental-future goals	Religiosity, religious practices
Future Negative (FN)	Relates to a negative view of future, fulfilled with worry and future anxiety; with behavior dominated by avoidance of losses and suffering	Avoidant and dependent decision making styles
Future Positive (FP)	Reflects a positive view of future, with approach orientation; the dimension is in fact very similar to Zimbardo & Boyd F dimension (also at the measurement level)	Rational decision making style
Expanded Present (EP)	Reflects temporal coherence; future and past become balanced	Balanced Time perspective, mindfulness

<sup>a</sup>With a potential distinction into Positive and Negative Transcendental Future

## *The Impact*

We already mentioned that Phil Zimbardo has always emphasized the robustness of the influence of time perspective on human behavior. Indeed, a body of empirical data based on the ZTPI confirms that time perspective dimensions predict numerous fundamental life outcomes, including health (see chapter “[Time Perspective as a Predictor of Healthy Behaviors and Disease-Mediating States](#)” by Hall et al., this volume), happiness (see chapter “[Time Perspectives and Subjective Well-being: A Dual Pathway Framework](#)” by Cunningham et al., this volume), financial (see chapter “[Time Perspective in Consumer Behavior](#)” by Klicperova et al., this volume) and pro-environmental behaviors (see chapter “[Understanding Environmental Issues with Temporal Lenses: Issues of Temporality and Individual Differences](#)” by Milfont and Demarque, this volume), among many others. The strength of these relationships, found in very diverse countries and cultures, is often indeed impressive. For instance, Zhang et al. (2013) shown that correlations between Balanced Time Perspective and well-being may reach the correlational level of .60, and time perspective dimensions are better predictors of well-being than are any of the famous Big Five personality traits (Zhang and Howell 2011). Numerous studies on time perspective revealed its fundamental role for different aspects of human functioning. To provide a reader with a brief review of the most important correlates of time perspective a nomological network was developed,<sup>2</sup> collecting a number of interesting results illustrating the role of each of the time perspective dimensions in different aspects of human functioning. The table is available as supplementary material at the end of the book. We are fully aware of the subjective nature of this selection – choices had to be made from the impressive number of highly important studies, and it could as well look completely different. We sincerely hope that authors of groundbreaking studies not mentioned here will forgive us our inadvertence.

Phil Zimbardo has always put an enormous effort to explore the paths linking academic psychology with real everyday life, and Time Perspective Theory is not an exception to the rule. Since the very beginning of his research on time perspective, he sought for ways to apply his theory to resolve fundamental social problems, including homelessness (Epel et al. 1999), substance abuse (Keough et al. 1999), and risky driving (Zimbardo et al. 1997). Probably the most famous application of his theory came as a result his cooperation with Hawaiian therapists, Richard and Rosemary Sword. Their innovative Time Perspective Therapy provided a novel approach for PTSD, revealing high effectiveness in a surprisingly short time (Zimbardo et al. 2012). Rick Sword recently passed away and Phil will always remember Rick’s vitality, sense of humor, charming manner and his endless compassion for anyone in need of an act of kindness—his recent death at too young an age is a tragedy for humanity and all who loved him. Psychological practice based on Zimbardo & Boyd’s theory proved useful also in other psychological disorders

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<sup>2</sup>Originally presented as a supplementary material in Sircova et al. 2014, updated and presented for the present introduction after their authorization.

(see chapters “[The Uncharted Territory: Time Perspective Research Meets Clinical Practice. Temporal Focus in Psychotherapy across Adulthood and Old Age](#)” by Kazakina; “[Friend or Foe? Escape from Death, or Death as an Escape?](#)” by van Beek and Chistopolskaya, both this volume), as well as in positive interventions among healthy individuals (chapter “[Time Perspective Coaching](#)” by Boniwell and Osin, this volume).

## The Book

The structure of the present book has been planned in a similar way as this opening chapter. The first part of the book provides a detailed review of Time Perspective Theory. It begins with its introduction in a reprint of the classic article by Philip Zimbardo and John Boyd (1999) from the “*Journal of Personality and Social Psychology*”, which introduced the Zimbardo Time Perspective Inventory (ZTPI) to a broader audience, and remains the most cited paper in this area. In the first regular chapter, Maciej Stolarski with colleagues provide an analysis of the idea of Balanced Time Perspective, including both its theoretical background and empirical operationalizations. Further, a reader will find a detailed introduction into extensions of Time Perspective Theory in two chapters describing additional time perspective dimensions. Wessel van Beek and Antanas Kairys take a reader beyond the boundaries of earthly life, introducing the specificity of Future Transcendental Time Perspective, whereas Maria Grazia Carelli with her colleagues describes the “missing piece” of Time Perspective Theory, presenting the Future Negative dimension. Antanas Kairys and Audrone Liniauskaite analyze the complex issue of similarities and differences between time perspective and personality, while Zena Mello and Frank Worrell propose an alternative to original Time Perspective Theory, introducing a conceptual model of time perspective in adolescence. Jenefer Husman and her team take an in-depth look into the role of time perspective in learning processes, emphasizing the role of the connectedness between future and present horizons. Finally, Sam Magilo, Yacoov Trope and Nira Liberman provide an impressive, erudite analysis of Time Perspective Theory, framing it in a broader context of their theory of psychological distance.

The second part of the book puts time perspective into evolutionary, social and cultural contexts. It begins with an interesting text by Curtis Dunkel and Daniel Kruger, who view time perspective from an evolutionary perspective, reflecting on potential environmental pressures that may modify individual time perspective profiles. Their work is followed by a series of chapters focusing on cultural aspects of time perspective. The first presents a review of the huge cross-cultural project, aiming to establish time perspective profiles of cultures. A group of 61 scientists from 24 countries, led by Anna Sircova, present a valid, cross-cultural version of ZTPI, illustrating temporal features of each of the analyzed countries. Bob Levine takes the reader into a fascinating time travel, uncovering the mysteries of geography of temporality, whereas James Jones and Jordan Leitner describe the SANKOFA effect, comparing differences between views of time by Caucasians and Blacks.

Finally, Nicolas Fieulaine and Thémis Apostolidis analyze how poverty and social insecurity may interact to shape individual time perspectives.

In the third part, a reader will find a deepened analysis of various particular psychological processes in time perspective: cognition, emotion, and motivation. First, Maria Grazia Carelli and Carl Johan Olsson report their unprecedented study on neuropsychological correlates of particular time perspectives. Marcin Zajenkowski and colleagues discuss how is time perspective related to cognitive ability, Kathleen Arnold and Karl Szpunar show how time perspective predicts differences in future simulations, whereas Gerald Matthews and Maciej Stolarski provide deepened analyses of time perspective with respect to affective processes. Three following chapters focus directly on one of the time horizons – Future. Willy Lens and Rachel Seginer focus on motivational properties of future perspective. Juan Francisco Diaz-Morales and Joseph Ferrari take an in-depth look into the role which time perspectives play in procrastination, while Zbigniew Zaleski and Aneta Przepiórka provide an overview of the relationship between time perspective and future goals.

Part IV contains chapters describing some non-clinical applications of the Time Perspective Theory. It begins with an interesting analysis of the role of time perspective in health behavior performance, provided by Peter Hall and colleagues. Next, Martina Klicperova and Jaroslav Kostal report results shedding some light on the role of time perspective in financial behaviors, whereas Taciano Milfont and Christophe Demarque summarize research on Future time perspective's influence on pro-environmental attitudes and behaviors. The following chapter in this part by Frédéric Martinez and Nicolas Fieulaine raises a novel issue of the role of dispositional and situationally induced time perspective in the reception of persuasive communication in campaigns promoting sustainable behaviors. Healthy and wealthy life in a well maintained environment should lead to increased happiness, and this is why these chapters are succeeded with a final chapter on the fundamental role of time perspective in development of well-being by Kerry Cunningham and colleagues.

The fifth and last part of the present volume was organized around the new work of clinicians and practitioners to provide the first exhaustive set of texts pointing out the possible ways to apply Time Perspective Theory into clinical practice. Firstly, Pio Enrico Ricci Bitti and his collaborators focus on the role of time perspective in positive aging, whereas Ilona Boniwell with Evgeny Osin provide an impressive set of time perspective-focused techniques and exercises, which can be used to make coaching practice more effective. Then, Alison Holman argues that time perspective is an important cognitive process involved in adaptation to stressful life events, viewing it from a stress and coping perspective, whereas Wessel van Beek and Ksenia Chistopolskaya explore the relations of attitude towards death and time perspective in suicidal patients. The two last chapters, elaborated by Elena Kazakina, and Richard Sword and colleagues, provide useful guidelines for applying Time Perspective Theory in different types of psychotherapy.

The explicit intention of your editors was to provide the widest currently available compendium of knowledge on time perspective by bringing together a diversified set of authors, combining experience with passion, wisdom with youthfulness, science with practice. The task did initially seem daunting to us, however, when it comes to

honoring Phil Zimbardo such concerns soon evaporate. Therefore, even if the present book is an effect of our joint, intensive work, it would never become real without Phil's indirect influence. By inspiring our ideas, by motivating us to develop a well grounded future orientation, by sharing his enthusiasm and irresistible youthfulness, Phil Zimbardo was in fact the one and true Editor of this book.

We hope that our work will become useful for all people who are or will become fascinated by the predominant influence of time on human life – and of the pervasive power of time in their own lives. May the best time be on our side!

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