

Preface

"These hours are our life..."

(Virginia Woolf)

A few words about the psychology of time

The time dimension question is presented currently in plenty of scientific enterprises in a direct way or creates the context of investigating other important human functioning issues (see the introductions and references to all the articles in this *Issue*). It is frequently recorded and elaborated on three interconnected levels: biological "body time", cognitive "mental time" and the phenomenological "existential time". The interest in *body time* is centered around experiencing cyclicality and rhythmicity and the strategies of subjective time estimation. Whereas *mental time* researchers study human experience of time duration and passage, the subjective feeling of event continuity and temporal segmentation within attention, perception, memory, speech and movements control as well. The field of their interests also involves reconstruction of human life experiences, coding patterns in a spatial way, and the consequences of linear time experiencing by man functioning within the culture of the West. The *existential time* is connected then with experiencing by man the phase and a "finiteness" of time in the life cycle and the human-specific tendency of *binding* the diverse aspects of individual experience into multi-plot, coherent and personally meaningful entirety. Diversity of human orientation towards particular time dimensions expresses itself, among others, in a dissimilar *attitude* towards one's own past-present-future richness of content of its cognitive representation, depth of retrospective and prospective in time and separation strategies of the whole time *scope*. A diverse level has been named as *consistency* and means the proportion between what in an individual's opinion has happened in his life and what can still happen in the future. There have been conducted many scientific projects around the connections between positive vs. negative temporality in general (or more narrowed separate time dimensions, as for example "future orientation") and such psychological phenomena like decision making, action effectiveness or psychological well-being.

Most researchers of human time experience rules used to emphasize the relation of openness to all temporal dimensions and capabilities to optimally

balance references to particular time dimensions with the optimal development of an individual, and even with his mental health. The concept of “optimally balanced temporal perspective” in this scope have been defined by Ph. Zimbardo & others as an ability to move smoothly and flexibly among diverse time perspectives, depending on the need following from a given task situation, situation circumstances and personal resources. In a specific situation, fixation on a definite time dimension, unrelated to others, is considered as non-adaptive. Some authors attribute an extremely vital pro-developmental role to the ability of harmonizing particular time dimensions, simply taking the position that it is one of the conditions of complete realization of human potential. Others develop a thesis that temporal balance enables man to maintain continuity in change and development processes, and indicates a close relation between reaching a dynamic balance within orientation at particular time dimensions and finding the sense of life. The dimension of *time competence/time incompetence* (apart from *internal/external locus of control*) has been recognized as important indicator of adequate functioning of an individual. The possibility to freely “move” among all the time dimensions without feeling the pressure or tension of any of them is stressed. Stimulating and enriching such cognitive-emotional access to particular time areas of one’s own biography and the ability of their personally meaningful integration (with the language as the main psychological tool – “the time architect”) underlie on the depth of raising up, education and therapy.

What we should keep in our minds is that time dimensions used to be described currently not only as the past, present and future, but are completed by the more extended context of the transcendent dimension of time flow. Free from denial or rejection mechanisms memory of the past, conscious and complete participation in the present, trusting and active anticipation of the future is enriched of the broader context then. There had been elaborated diverse solutions in the scope of daily life *time management* (hierarchy of goals, setting priorities for undertaken activities). But currently we observe the strong tendency of taking into account a broader perspective of “the time of life”, when we talk not as much about “time management” but rather about “managing self in time” (in the form of *biographical competence, self-related wisdom* and other cognitive-emotional psychological skills). Such an attitude supports the internationally postulated general shift from the “economy of time” only to the “ecology of time”. Realizing the deeper idea of „sustainable development of our human society” (as it had been described by United Nations Agenda 21) allows searching for the “complete & reach theoretical picture” of the subject. Following this notion is a kind of protection from losing really important dimension in the research activity and applicative psychological enterprises as well. Looking for investigative answers for particular time psychology questions we should never forget about “the essence” of the topic, remembering that even we identify ourselves as scientists – previously we stay the humans and “these hours are our life...”.

A brief history about the idea of *Annales Universitatis Paedagogicae Cracoviensis On Time Perspective Special Issue*

The idea to compose the Special Issue of *Annales Universitatis Paedagogicae Cracoviensis. Studia Psychologica VI* conducted by the Department of Psychology inside the Pedagogical University in Krakow which would be devoted to the psychology of time was rooted in the 1st International Conference: *Time Perspective. Converging Paths in Psychology Time Theory and Research*, which was held on 5–8 of September 2012 in Portugal. We have kept in our minds the really interesting and fruitful debates inside the beautiful buildings of the old Coimbra University. They were conducted in a diversity of topics under the professional and friendly “wings” of emeritus Professor of Stanford University – Philip Zimbardo. The real contact with Professor Zimbardo led two of participants from Poland: Urszula Tokarska and Joanna Kossewska to the idea of inviting this unquestionable international authority of the psychology of time to play the honorary auspices under *Human Development Support Psychology Unit*. Professor Philip Zimbardo gave us his acceptance and our small Psychological Unit have started a new phase of activity – focusing all the efforts around the time psychology.

The second idea was the simple consequence of the first one, leading us to a vision of collecting selected texts of time psychology conference speeches, which were not published in places suggested by conference organizers. In our opinion they could provide a valuable corpus of articles thematically related by the “time psychology” context that would be edited and standardized in the Special Issue of *Annales Universitatis Paedagogicae Cracoviensis. Studia Psychologica* by experts within the given domain. Thus, the effort of active Time Perspective conference participants would be more highly appreciated and rendered useful. We had gained Professor’s friendly acceptance once again and disseminated the invitation announcement to the participants of the 1st International Conference on Time Perspective and other authors interested in the topic. The process of collecting and elaborating received articles run for several months and now we have the pleasure to enjoy together the fruits of our common work...

Our (inter-continental) authors

Finally, after the internal selection and external double-blind reviewing process the *Special Issue* is composed of 12 articles written by 20 authors representing 11 countries from 4 continents. They came from 4 European countries (Portugal, Poland, Germany, Hungary), South America (Uruguay), Asia (Israel, Iran, Taiwan, Nepal, Japan) and Australia. The diversity of authors met on Time Perspective Conference at Coimbra. A few of them joined the writing process just after. One of them, influenced by the expressive „after conference Portugal stories” has decided to conduct and describe her original psychology of time research regardless of the conference enterprise.

Thematic content of the articles collected in this *Special Issue*

The multi-plot character of all the collected articles enables to assign them to the single narrow separate sub-categories. Even though, in the aim of giving the readers the possibly clear vision, we decided to group them into a few thematic groups.

PART I METHODOLOGICAL ISSUES

1. **Studies of psychometric properties of the Zimbardo's *Time Perspective Inventory* in other countries.** Bernd Reuschenbach, Joachim Funke, Annika M. Drevensek & Nadine Ziegler in their article "*Testing a German Version of the Zimbardo Time Perspective Inventory (ZTPI)*" indicate that the German version of the ZTPI proves to be internal consistent and reliable in retest, except the Future Scale. Correlations with conceptually related tests indicated a fair degree of construct validity within the framework of classical test theory, but the fit to a Rasch model was not successful.
2. **Relations between the results and the tools measuring the time orientation.** Nurit Carmi in "*Different Measures of Future Orientation May Yield Opposite Predictions of Environmental Attitudes and Behaviour*" presents the study compared between two primary measures of Future Orientation: *Zimbardo Future Time Perspective (F-ZTP)* and *Consideration of Future Consequences Scale (CFC)* in the environmental context. The comparison between the different predictions gained by different measures suggests that future orientation is multi-dimensional and different constructs capture different dimensions of it. When temporal conflicts involve social conflicts, as in most environmental conflicts, an inconsistency between the predictabilities of the constructs may emerge, revealing a conflict between the "futures" people are orienting at.

PART II REGULATIVE FUNCTIONS OF THE GIVEN TIME PERSPECTIVE

3. **Regularity in the emotional functioning of a human in specific time.** Daily and weekly variability of mood experience is the subject of Agnieszka Wilczyńska's research "*Variability of the Relationship Between Mood and Social Zeitgeber*". The article describes how daily mood changes can be determined by cycles characterised by psycho-physiological and social changes. The objective of the research was to establish whether the population subjected to the research-related tests experienced daily and weekly mood variability and, if this relation has been confirmed, describe the latter. The result obtained in the tests indicated the existence of daily differences of positive affect as well as weekly differences in relation to positive and negative affect.
4. **The relationship between time changes in using emotional regulation strategies and emotional well-being.** In the study of Yu-Jing Gao's "*Interindividual Differences and Intraindividual Variability in Emotional Well-being: an Examination of Gender, Time Perspective and Emotion Regulation*" there were examined trajectories of emotional well-being, positive affect, and negative

affect with time passing. The effect of differences in gender and time perspective profiles on intraindividual variability of weekly affect and associations between time trends of affects and use of two emotional regulation strategies: reappraisal and suppression, were investigated. The habitual use of reappraisal was related to the increase of emotional well-being and positive affect and related to the decline of negative affect. By contrast, habitually using suppression was related to an increase of negative affect over time. The main findings also indicated that individuals with balanced time perspective had higher levels of emotional well-being compared to those without balanced time perspective at the baseline of the study.

5. **The well-being consequences of using the beneficial time perspectives.** Elizabeth C. Temple in her *“Associations between Psychological Well-being and the Development of Beneficial Time Perspectives”* shows that even a growing body of research suggests that some time perspective orientations are more beneficial than others with regard to wellbeing, however, little is known about the factors affecting the development of these time perspectives. This gap in the research was addressed through her studies from which she developed two models of the associations between attachment orientation, basic psychological need satisfaction and Past Positive (PP) and Past Negative Time Perspective (PN) as measured by the *Zimbardo Time Perspective Inventory (ZTPI)*. While anxious and avoidant attachment orientation were associated with both PP and PN, the three basic psychological needs were differentially associated. The findings of these studies suggested the importance of early childhood care to the development of beneficial time perspectives.
6. **The connections between time perspective and preferred values of university students.** In Alina Kałużna-Wielobób’s study *“Student Time Perspective in the Context of Their Preferred Values”* positive correlation was found between the *Zimbardo Time Perspective Inventory* hedonistic present scale and following values measured by *Schwartz’s Portraits Value Questionnaire*: hedonism, stimulation and self-direction, and negative correlation with benevolence and tradition. The future perspective was positively associated with conformity, tradition, achievements, self-direction and universalism, and negatively with hedonism. Positive past is positively connected with conformity and tradition. Negative past – positively with power and negatively with stimulation and self-direction.
7. **Time Perspective’s association with Self-Esteem.** Victor E. C. Ortuño & Alejandro Vasquez Echeverría in their *“Time Perspective and Self-Esteem: Negative Temporality Affects the Way We Judge Ourselves”* explore (enriching previous correlational models usually used in this topic) a structural equation model of Time Perspective’s association with Self-Esteem. They show that negative effects of time dimensions (rather than positive ones) are more related to Self-Esteem.
8. **Career indecision status in the context of preferred time perspective** is the aim of Fruzsina Lukács and Gábor Orosz’s research described in *“Career Indecision from the Perspective of Time Orientation”* article. Previous works mainly

investigated the relationship between career indecision and future orientation, neglecting attitudes towards other time perspective dimensions. To overcome this hiatus – the *Zimbardo Time Perspective Inventory* (ZTPI) and *Career Factor Inventory* (Chartrand, Robbins, Morrill & Boggs) were used. By considering variable-centered and person-centered analyses, results suggest that scores on TP factors are closely associated with the career indecision type. This patterns can be classified into: “Path Seeker” & “Ready to Decide” (subjects with a balanced time perspective); “Chronically Indecisive” (dominated by the past negative factor and less future oriented) and “Choice Anxious” (with scores lower on all TP factors except Past-Negative TP than any other group).

PART III THE TIME PERSPECTIVE CONTEXT OF PERSONS WITH SPECIAL NEEDS

9. **Deaf people functioning in the time perspective context** is the aim of Joanna Kossewska’s *“Time in the Context of Deafness”* research. Hearing impairment is here treated as the important factor influencing individual experience and development. The paper analyses the three levels of psychological time in the context of contemporary research. The results are discussed in the frame of such crucial conditions as communication, language and culture. Temporal perspective is described here in the context of world representation understood as a system of knowledge comprising an individual’s information and beliefs developing as the individual gains experience, which plays a regulative role in making choices, building attitudes towards the real world and solving problems. Deaf adolescents concentrate on present more than their hearing peers.
10. **Comparing time perspective between representatives of different diseases.** In this field of investigation Masoumeh Nozari, Ghasem Janbabai & Yarali Dousti the authors of *“Time Perspective in Healthy Individuals and Patients Suffering from Cancer and Diabetes”* paper, aims to compare time perspective between diabetic and cancerous patients and healthy people, which showed as three groups different time perspectives and different ranking in time orientation. Findings show that the disease and its type can significantly impact time orientation of the patients. Therefore, to prevent potential subsequent outcomes, the patients’ time perspectives towards disease should be improved especially under disease conditions. The author claims that the type of time orientation can significantly improve health-related prevention behaviours and influence disease outcomes through boosting health-oriented behaviours.

PART IV TIME PERSPECTIVE IN PSYCHOLOGICAL APPLICATIONS

11. **Assessing the effects of psychotherapy.** Shinichi Sakuma, Bijay Gyawali, Takiko Kimura, Chiaki Nishikawa, Junko Watanabe & Teruchika Katsumata in their common work *“Changes in Time Perspective Resulting from Psychotherapy”* based on the concept of the feedback and feedforward systems in “cybernetic-psychology” assess how effective psychotherapy is. The Time Perspective Scale (TPS) was administered to three clients (diagnosed as *hikikomori* and PTSD suffered) in order to assess the effects of psychotherapy. Results indicated that at the end of the intervention, clients’ thoughts were positively focused on the present and the future. In comparison to their negative thoughts

concerning the present and the future during the pre-intervention period, two clients displayed positive feedback regarding the past, and all clients displayed positive thoughts about the present as well as positive feedforward thoughts for the future. The clients had more positive and more constructive cognitions after the intervention. Therefore, the time perspective measurement is a useful tool for assessing the therapeutic efficacy of the time perspective.

- 12. The existential and narrative dimension of “the applied psychology of time”.** Urszula Tokarska in her article “*In Eighty Stories Around the Human Life. The Psychological Time Binding Strategies in The Narrative (auto) BIOGRAPHICAL GAME*” considers the necessity of the meaningful integration of all the “time rooted plots” into individual *life stories* in the deep education conducting. Searching for the sense of continuity, distinction and coherence of one’s own story are usual ways of work within the narrative approach in psychology. In this field *the psychology of time* meets the existentially oriented *narrative psychology* in the potentially meaningful cooperation, leading to the relatively new field of “the applied psychology of time”. The article presents the original psychological tool of practicing the skills of “biographical competence”, rooted in binding “the time of life” with “the daily time” in the form of narrative board game with the dice and *Hypertextual Life Story Map*. The game exercises examples are attached.

Now it comes “a time” for the best acknowledgments:

First of all – for Professor Philip Zimbardo, for all inspiration given to us and for his on-going well-wishing acceptance of the idea:

Dear Professor,

please accept this Issue as our gift to you for your 80th birthday!

A lot of praise for our Authors – for their research, linguistic and patient elaborating efforts. Waiting for something is not an easy process... Our Authors had the unquestionable possibility of practicing two different “time exercises”: to manage the pressure of time at the early beginning and the prolonged period of waiting for final elaboration. They achieved it perfectly...

Many acknowledgments **for all the Reviewers** and for the **Annales Editorial Team** – for their systematic and engaged beneficial work.

At the end of this introduction please let me quote the (well known) results of statistic research counting the ways of distribution of “life time” of an average west countries citizen. Adopting 75 years as the average biological time of our life we should notice that 25 years of this we devote to sleep, 17 years for work & school activities and 7... for eating. Adding to this, approximately, 6 years usually allocated for watching TV, 5 for medical proceedings, 2 for visits, 2,5 for driving, 1,5 for toilet and the other 1,5 for waiting for something, 1 for dressing – we still have in our disposal 6 years for “other activities”... I hope that the potential reader is going to designate some of his precious time to become acquainted with our *On Time Perspective Special Issue* content.

On behalf of the Editorial Team please feel invited to the current and future collaboration.

Urszula Tokarska