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Time & Perspective

Time is a physical phenomenon that we all seem to have an innate ability to monitor, and our sense of time governs how we behave and live our lives. The phrase 'sense of time' itself raises some intriguing questions. What is our "sense" of time? With other physical phenomena, we know that our perception of them is associated with our 5 established senses: sight, hearing, taste, touch and smell. Yet somehow, none of these apply to our perception of time. We can't exactly taste or smell time, let alone hear or see it. It seems there is some other capacity, or combination of senses, that we use to detect and make sense of this all encompassing physical law that governs us all.

This wiki will focus on giving a brief historical and conceptual overview of the psychological study of Time Perception (TP), touch on many of the profound ways in which it may influence our decisions and behaviors on both individual and cultural levels, discuss how it may affect the quality of our lives, and most importantly identify what role a Balanced Time Perspective (BTP) has in the domain of Positive Psychology.



"Time perception matters because it is the experience of time that roots us in our mental reality." (<http://www.brainpickings.org/index.php/2013/07/15/time-warped-claudia-hammond/>)

- Maria Popova

Time Perspective(s)

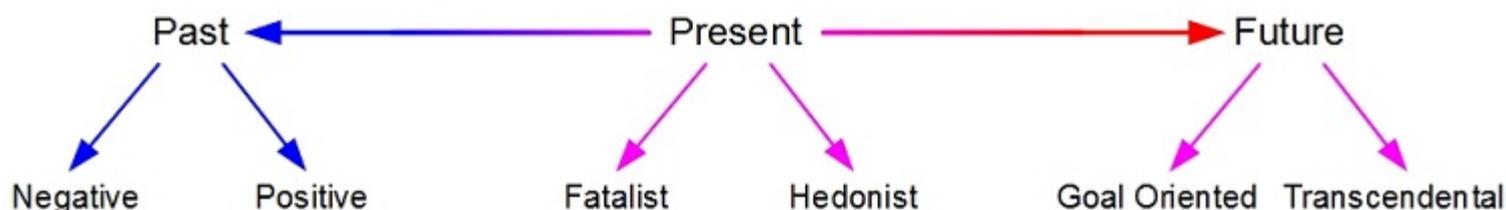
Amongst the leader's of the time perspective field of study are Zimbardo and Boyd of Stanford University. Their 1999 study conceptualises the way we perceive time not as a direct perception of time in itself, but as our categorization of our various personal and social experiences within a certain time frame. In a way, our "sense of time" is more of a tool by which we assign a certain order to things, which helps us to navigate various experiences in our cognitive framework. Zimbardo & Boyd (1999) argue that TP can function as an individual difference variable that significantly affect much of our behavior. They conclude that we do indeed live in the present, but that our present behavior or state of mind is strongly affected by the way we think about the past, present and the future. They define TP as:

"the manner in which individuals, and cultures, partition the flow of human experience into distinct temporal categories of past, present and future". (zimbardo, 2002)

quote:

TP can be seen as an individual difference and has a strong effect on people's behavior and lives, Zimbardo and Boyd

(1999) decided find a way to study the phenomenon empirically, by creating a measure of TP that would assess variations in TP amongst individuals and investigate the different profiles and biases people can have. After conducting an extensive factor analysis they found that people may exhibit 5 different types of TP:



1) Past - Negative: this is associated with predominantly negative views of the past events in your life. Memories of aversive, traumatic and painful events often come to mind causing people to ruminate and experience the pain over again and experience regret. Additionally, the recollection of memories may be viewed through a pessimistic lense where even neutral events can be seen negatively, which may significantly affect the decisions and actions of the present, as well as projecting into a pessimistic perception of future events.

2) Past - Positive: this perspective is also one in which an individual often dwells and reflects on the past, but in contrast to the previous perspective mentioned, it is mostly positive events that are recollected, which can cause strong feelings of nostalgia, sentimentality and warmth. Needless to say, this can also affect current and future behavior, with individuals wishing to relive the 'good old days'. It may certainly also lead to a negative perception of the future, where individuals feel it is unlikely that things will ever be as good as they used to be.

3) Present - Hedonistic : This TP is commonly associated with those who "live for the moment", the here and now type of people who act on impulse and take risks, who often prefer to indulge in present pleasures rather than consider the future and potential consequences.

4) Present - Fatalistic : Individuals that are influenced by this TP have a fatalistic view of the future and life in general, they believe that everything that happens is predetermined and that they have no influence over the events that take place in their lives, i.e. they are the victims of fate. This view is often accompanied by hopelessness and a pessimistic outlook. In a way these individuals exhibit a lack of a particular time perspective, in the sense that they do not dwell on past events and are not stuck living in the future, instead being trapped in the present believing that their past and future choices have no consequence since they are at the mercy of fate.

5) Future : In the original paper, Zimbardo & Boyd (1999) identified just one future time perspective factor, calling it simply 'future'. This TP is characterised goal-directed behavior, i.e. the present behaviors are planned in accordance with achieving future goals or particular rewards. These individuals lack novelty and sensation seeking behaviors, instead having the ability to sacrifice immediate rewards and hedonistic behaviors in favor of future benefits. Their actions are well-calculated and planned ahead (carefully considering consequences) as they exhibit high conscientiousness, with discipline and consistency being essential to achieve positive outcomes in their future.

However, in more recent research Boyd, Zimbardo and colleagues (2006) have added a new 6th time perspective, making in 2 TP's for past, present and future. They split the 'Future' perspective into two distinct types: future/goal-oriented and future-transcendental. Future/Goal-oriented is the one originally described (above).

6) Future - Transcendental : This TP is one that is influenced by our thoughts and beliefs about mortality and life after death, which in turn is heavily influenced by religion and spirituality. People with this TP commonly believe that life actually begins after the death of the mortal body and this, unsurprisingly, has drastic consequences on behaviors and attitudes towards the present and future, e.g. by living in ways the religion prescribes will achieve a better life after death (e.g. going to heaven vs. hell).

"The future is the only transcendental value for men without God."

- **Albert Camus**, *The Rebel: An Essay on Man in Revolt*

Balanced Time Perspective

Zimbardo and Boyd (1999) explain that since our particular TPs are learned and shaped by our environments and

experiences in life, we may develop a habitual overemphasis of any particular TP, and thus attain a so-called temporal bias in our cognitive thought processes. In other words, we may become too oriented to either the past, present or future, which will be like the lense through which we see our world. They argue that when this biased TP view is chronically implemented, it becomes a personal disposition, i.e. individual variable, which is heavily predictive of how an individual will act when faced with daily choices in life as well as their general attitudes. Furthermore, they point out that any one of these TP orientations can lead to a favorable decision in a particular situation, but that the optimal TP for various situations will differ, so being biased towards only one will often lead to negative outcomes.

So, if relying on any one of these TPs alone is generally bad, what should we do?

Zimbardo and Boyd (1999) argue that the ideal framework for TP is one which allows the individual to be flexible in which TP to use in various situations. In other words, depending on the situational demands, social or personal constraints and resources, the ideal and most positive way to adapt your TP is be able to flexibly change which TP (past, present or future) you use in any particular case. This is what they coined a “Balanced Time Orientation”, commonly known as **Balanced Time Perspective (BTP)**.

A balanced time perspective allows an individual to benefit optimally from any TP depending on the situation, and is promoted as the most psychologically healthy for both individuals and societies. A focus on the past allows individuals to appreciate their culture, heritage and traditions, ultimate leading to a more grounded sense of identity. A present-hedonistic focus allows an individual to experience the vast joys in life, without being clouded and inhibited by past trauma or fear of future consequence. A future allows an individual to pursue their goals, achieve success, and know when to focus on the task or enjoy the present, ultimately conquering the often elusive ‘work-life balance’.



"Mental time-travel is one of the greatest gifts of the mind. It makes us human, and it makes us special."

- Claudia Hammond

Now, in their newer book “The Time Paradox” (2008), Zimbardo and Boyd explain that humans often exhibit a series of paradoxes when it comes to our time perception. Firstly, we are without a doubt heavily influenced by our TP, yet we rarely think about this in our daily lives. Second, all 6 of the TPs identified have their benefits (and drawbacks, of course), yet when we over-rely on any one in particular it becomes more associated with costs than benefits. Lastly, they argue that since our particular combination of TPs is learned and shaped by personal experience, our accumulated attitudes can in turn influence the attitudes of entire cultures.

--> The following sections will discuss in more detail how TPs can influence our lives individually, and afterwards touch on how these can combine to affect our cultures.

Measuring Time Perspective

Time perspective is primarily measured using the Zimbardo Time Perspective Inventory (ZTPI) (Zimbardo & Boyd 1999). The inventory is a scale that includes 56 items which measure the main 5 time perspective components. Examples are statements such as ‘I make lists of things to do’ for the future orientated perspective and ‘I get nostalgic about my childhood’ for the pas positive perspective. These statements are then rated on a 5 point scale from very untrue to very true. Using this inventory as a guide can determine what time perspective people have. To have a balanced time perspective (BTP) you need have a high Future (F), Present Hedonistic (PH), Past Positive (PP) and a low Present Fatalistic (PF) and Past Negative (PN) perspective. Zhang & Howell (2013) compares different methods used, one being

the cut off point, if you are 33rd percentile and below in PN and PF and 66th percentile and above in PH, F and PP then you are considered to have a balanced time perspective. However only a very small number of subjects fell into this category. They compared this method to the deviation from a balanced time perspective, this scored the distance each person had from the optimal value. Thus this reduced concerns about not getting enough subjects hitting optimal levels which was a weakness in the cut off level method. Studies in this area use mixture of these methods.

Another scale has been used in recent studies. Webster (2013) used a balanced time perspective scale, which narrowed down the 5 time perspectives to just past and future components. These then created four new categories of perspective. Scoring medium on both past and future categorized you as time restrictive, high on past and low on future formed futuristic, low on future and high on past were reminiscers and above the medium on both saw you go in the balanced category, know as time expansive. This shows another way to measure balanced time perspective, that may make more of an appearance in more recent research.

Watch & Learn: The Secret Powers of Time

Test yourself: the Zimbardo Time Perspective Inventory (ZTPI)

Click on the link to complete the ZTPI and find out how "balanced" are: (<http://www.thetimeparadox.com/zimbardo-time-perspective-inventory/>)
(<http://www.thetimeparadox.com/zimbardo-time-perspective-inventory/>)

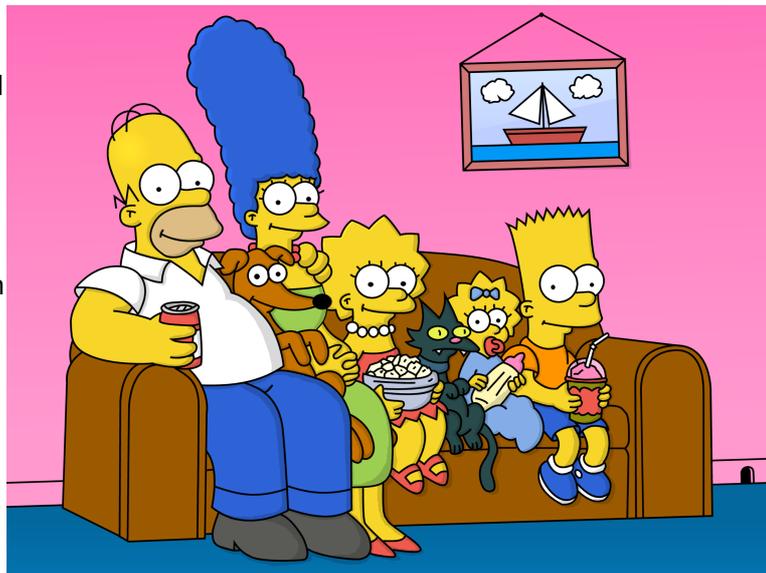
Individual Differences: Balanced is better than Biased

Time perspective is a cognitive operation that has a wide spanning influence in how people live their lives in many different areas. Emotional reactions and preferences for locating actions in different time zones cause us to find it difficult to switch between the time frames (Boniwell & Zimbardo 2004). Thus this has lead us to find a great deal of individual differences in people that have differently biased time perspectives. For example Mello & Warrell (2006) found that a present hedonistic perspective bias was more prevalent in older adolescents than in younger adolescents or older

adults. This may be due to their thirst for thrills and excitement that have come with newly found freedom. They also found that there was a gender difference in a bias towards present fatalistic perspective. It was stated that males were more likely have this outlook than females. Other papers have found that women have a greater bias towards a present hedonistic perspective (Zimbardo et.al 1997).

Family, relationships and social interactions

Different time perspective biases have also been connected to different quality and quantities of social relationships. Holman & Zimbardo (2009) found that a past negative bias was related to low support and high conflict with family and friends. This could be because they are trapped with resentful thoughts, holding grudges, and unable to move on from past conflict. However some biases like past positive, present hedonistic and future orientated were seen to be related to positive social relationships. High levels of support and low levels of conflict from a wide network of relationships are due to reminiscing on positive times, living in the moment and including people in a future you are creating. Thus having this multidimensional or balanced view on time perspective is key in creating, enjoying and maintaining positive social relationships.



Academic achievement

A bias towards certain time perspectives can be the difference between failing or passing an exam. Mello & Worrall (2006) found that people with a present fatalistic perspective had much lower academic success than people with a future orientated perspective. There are many reasons why this could be, some research has looked at procrastination behaviours as a possible reason. Time perspectives have huge impacts when thinking about meeting deadlines and using time efficiently, so biases to certain perspectives can cause procrastination which can adversely affect these.

Ferrari & Díaz-Morales (2007) Avoidant procrastination was positively correlated with present fatalistic orientation. This is due to people seeing that their future is already made up for them, thus having a negative outlook means they avoid having to use skills that they may have, that enable them to achieve goals. Having this perspective allows them to lower anxiety over the looming failure to accomplish task. They procrastinate until there is no time left to complete the task, which in turn allows them to shift blame from themselves, which in turn protects the wellbeing of said person. However obviously this is only a short term solution, causes problems for the future. It was also stated that present hedonistic perspectives correlate with arousal procrastination. These people procrastinate by seeking immediate and pleasurable rewards to cut present tension of looming cognitive effortful tasks. People with future orientated perspectives however, although having short time stress and tension in the present, procrastinated less. This is due to them looking towards future goals and forgetting about short time wellbeing. This all suggests that a more balanced time perspective in regards to studying for exams and meeting deadlines can be of great benefit, cutting short term stress and achieving long term goals.



PROCRASTINATION

HARD WORK OFTEN PAYS OFF AFTER TIME,
BUT LAZINESS ALWAYS PAYS OFF NOW.

Health and wellbeing

Much of the research concentrates on how detrimental time perspective biases can be on your health and wellbeing giving us more evidence towards a balanced perspective being better for all occasions. The following sections on Alcohol & Drugs and HIV & Aids show that your perception of time can have extreme consequences in the long term.

Alcohol & Drugs

Keough, Zimbardo & Boyd (1999)'s study focused on self-reported use and abuse of alcohol, drugs and tobacco. Present hedonistic and present fatalistic time perspective biases found a positive correlation with reported alcohol, drugs and tobacco use and abuse compared to the negative correlation future oriented had with them. With the hedonistic bias could be due to their perspective of living in the moment and seeking pleasure and risk taking with health because they are not thinking about future consequences. With fatalistic views people may see a bleak future so use and abuse due as a way of coping in the present and because they can't change their future. Future orientated people correlate negatively because they see only the future problems of use and abuse in the present. An overall balanced time perspective could prevent future health problems of use and abuse but also allow for moderate and safe use.

HIV & AIDS

Rothspan & Read (1996) & Kalidman et.al. (1997) found that differences in time perspective biases lead to very extreme

differences in relation to thoughts, fears and protection against HIV and AIDS. Firstly Rothspan & Read (1996) found that within the heterosexual population those with a high future orientated perspective had fewer sexual experience and partners. Quizzing partners on sexual history and holding off performing sexual acts with new partners were seen behaviours that were used far more as they prevented future problems, reduced exposure to HIV. However those with a hedonistic present oriented perspective were seen to be the opposite, more partners, more experience and displayed more risky behaviour like unprotected sex. This was due to living in the present and seeking pleasure without caring about risks. Fear of Aids was also an interaction in this study, future oriented people experienced it to a far greater extent.

Kalidman et.al. (1997) study looked at gay men in relation to HIV and AIDS, time perspectives and wellbeing. Results found that men with a present fatalistic bias engaged in more unprotected anal intercourse outside of exclusive relationships, were more dissatisfied with life and considered themselves to have a shorter lifespan. Thus to lower rates of HIV infection and increase use of protection we could look at balancing time perspectives which would build self-worth, allow for future goals and focus on stronger more positive relationships.

Culture & Time Perspective



As we have seen, there can be individual differences in the time perspectives that we focus on and adopt. As well as these individual differences, the culture, environmental factors, process of socialization and education can also influence the time perspective that we take (Sircova, 2007)

Subjective Time

Humans have become great experts at measuring time objectively. We have implemented rigid systems and measurements of objective time. However there is also another more qualitative aspect to time that is psychological, subjective and can vary from person to person and from culture to culture. This varying temporal focus will determine how we live and view our lives (Boniwell & Zimbardo, 2003). For the most part, subjective time is an unconscious process that we are not aware of unless we pay special attention to it.

Time as a Silent language

Time perception acts as a form of nonverbal communication, a silent language if you like, that plays a role in how people from different cultures communicate, interact, regard punctuality and how long they are willing to wait (Brislin & Kim, 2003). This unspoken language can help us understand how people relate within a specific culture to one another, and the clashes that can occur when people do not perceive time similarly. Exploration into subjective and psychological time could play an important role in understanding differences in viewing goals, effectiveness and evaluation in cross-cultural work.

Monochronic and Polychronic Time



A *monochronic time* system is a tightly managed and scheduled time system where one activity or task is carried out at a time. Monochronic time has gets its roots from the Industrial Revolution, where large scale factory production ensured that supply and demand were in strict adherence with deadlines and the labor force had somewhere specific to be at each hour and minute of the day. (Guerrero, DeVito & Hecht, 1999). The United States is an example of a society that works with monochronic time. In cultures such as the US, time is a commodity and means money. Great prevalence is given to the schedule and getting the job done quickly and efficiently.

The United Kingdom, Germany, South Korea and Scandinavia are all cultures that work with monochronic time.

A *polychronic time* system takes a much more fluid and arbitrary approach to time and is less focused on accounting for every single unit of time. More than one task can be carried out at once and the schedule is more of something that is used loosely and it can change without much notice or accountability. Polychronic time is grounded in the

seasons, traditional ways of life and religion and not the minutes and hours on a clock face. In a culture using polychronic time, more than one task can be carried out at once. There is more emphasis on traditions and relationships rather than the task at hand itself (Cohen, 1997). A less formal approach to time is taken and being on time is not necessarily all that important.

China, Africa, Saudi Arabia, India and Mexico all adopt polychronic time.

Now we know how time can be valued and measured differently, let's have a look at different time perspectives across cultures:

The difference in reporting events such as murder was observed when both Chinese and English newspapers were examined in both languages (Morris and Peng, 1994). Analysis of the articles relating to murder showed that the English newspaper focused more on the disposition of the murderer, the negative traits he possessed and how unstable and bad tempered he was. In contrast the Chinese newspaper went into detail of the history of the offender and possible

justifications as to why he had committed the offense and was the way he is. This newspaper speculated whether he had lost his job or whether he had been fired. This indicates a temporal focus on the past in the Chinese language paper and a bias towards the present in the case of the English language paper.

The Chinese's tendency to focus more on the past than those in the West was further shown by Ji and her colleges (2009). When compared to a Canadian sample, Chinese participants rated things that had happened in the distant and recent past as more relevant after reading a description about a theft and a list of behaviors that occurred in the past or the present. They also recalled past events in greater detail than Canadian participants. The Chinese viewed past events to be closer to the present moment, suggesting that they have an overall greater awareness and higher value of the past than Canadian participants.

Differences in the orientation of time perspectives have been observed by Jonas Ekselius (2011) in students living in both the developing and the developed world. Students living in Namibia and in Sweden were completed the Zimbardo Time Perspective Inventory (Zimbardo & Boyd, 1999), and Namibian students participated in focus groups to further explore their perceptions of time. Significant differences between the two groups of students were found in both past negative and past positive. Swedish students scored lower on past negative and higher on past positive than Namibian students. This indicates that Swedish students are more nostalgic and sentimental about the past compared with their Namibian counterparts. The Namibian students scored high on past negative and this shows that they might spend energy and time looking back on past events and wondering what they could have done differently. The focus groups revealed two factors important for Namibian students that shaped their perceptions of the past were economy and freedom. They thought that they compared negatively to Europeans for both these factors and that this affected their often negative view of the past.

Cultures with Interesting Perspectives of Time

The Pirahã Tribe is a small native tribe living in the Amazon rain forest. More than 30 years ago missionary and ethnologist Professor Everett tried to teach members of this obscure tribe to count. He was hopelessly unsuccessful as they have a limited language that mainly consists of a kind of sing-song communication more akin to whistling and humming than any language that we know. They use no numbers or letters and so have no concept of time as we know it (Davies, 2006). For this tribe there



is no past tense, everything exists in the present moment. As soon as something ceases to be present moment it is forgotten about and ceases to exist. Life for the Pirahã is all about the here and the now and taking pleasure in each passing moment. We can learn an important lesson from their lifestyle, they are not focusing negatively on the past or even worrying about the future. They are living in the moment.

When Balanced Time Perspective Goes Wrong



Having an unbalanced time perspective in areas of conflict can have disastrous consequences on achieving peace and coming to an amicable resolution. Let's have a look at how a lack of a balanced time perspective and dwelling on the past is hindering negotiations in the Israeli-Palestine conflict.

The attitude towards and conceptualization of time is something that is involved in defining each culture. Without understanding key factors such as time in a culture, it is near to impossible to understand the behaviors that define any given culture. As we have already seen in the case of monochronic and polychronic time examples, culture can roughly be split up into two categories: western, technological - cultures and non-western cultures (Fleisig & Zakay, 2007).

As in monochronic time, **techno-western** culture sees time as an economic resource that is limited. Time perspective is directed towards the future and it should be scheduled and planned with an emphasis on punctuality.

As in polychronic time, **non-western** culture does not place economic values on time but instead looks to the past as a source of wisdom and learning.

Religion and time are also intertwined in a culture and an analysis of the perspective of time will inevitably have to take into account the combination of culture and religion. Given the differences in cultures between conceptualizations and perceptions of time, conflict and negotiation will always bring together sides with great differences in these domains. Israel and Palestine are prime examples of this phenomenon.

The Concept of Time in Arab-Islamic Culture

Islamic culture is deeply rooted in the principles of religious beliefs that form the basis of Islam (Alon & Brett, 2007). Islamic culture regards time as "event time", meaning time is defined by the events that occur within it and not by the physical clock face. Time is not characterized as an economic resource in this culture, it is viewed as being in abundance and is a circular process (Fleisig & Zakay, 2007). Islamic culture emphasises the virtue of patience and waiting, and regards haste as an undesirable quality. Since Islamic culture has its roots in religion the time perspective of Arab-Islamic culture is very much the past perspective.

The Conceptualization of Time in Arab-Islamic Culture and its Influence on Negotiations

According to Alon & Brett (2007), The Arab-Islam conceptualization of time and their dominant past time perspective has many implications for conflict negotiation. Since, patience is glorified in this culture and haste is seen to be to the

detriment of dealings, long prolonged negotiation are favoured and postponement of talks is not seen as a negative. This is because time is seen as being on the side of the Islam's faith as eventually Allah will join everyone together under the umbrella of Islam. Islam believes negotiations should be conducted at a calm pace and the past should constantly be referred to when planning for the future. Historical events are glorified and regarded as framework for all negotiation. Planning for the future is seen as problematic, as this is a human intervention in Allah's will.

Hudna or Regi'a, an Example of a Culture Clash



An example of a problematic situation relating to different understanding of concepts of time can be seen in talks between Hamas and Gaza about their terms relating to time and ceasefire. The term of calm or quiet in Arabic is “hudna” and in Hebrew as “regi'a” (Fleisig & Zakay, 2007).

“Hudna” as a concept is diluted and can mean imply a temporary arrangement. Although its meaning is a break or a rest, it is not final and can even be said with the intention to take up arms again. The word does not infer any preparedness to solving long term problems. The word also has its origins in Treaty of Hudeibiya signed between the Prophet Mohamed and members of the Tribe of Quraish in the year 628 but breached by Mohamed in 630 after he gathered enough forces to conquer Mecca. Like Islamic time perspectives being rooted in the traditions of the past, so is this word.

In contrast the concept of the Hebrew word “regi'a” has permanent connotations. Words describing it in the dictionary are “agreement” and “treaty” (Even-Shoshan Dictionary, 1991).

It is clear that negotiations are going to be made difficult when a different time perspective is applied to a concept by either side.

The Conceptualization of Time in Jewish -Israeli Culture and its Influence on Negotiations

An analysis of Jewish-Israeli attitude towards concepts of time must take into account two factors: the Israeli-secular factor and the traditional-religious factor. These components represent different aspects of the culture, There is a secular and a religious element to be observed (Fleisig & Zakay, 2007). Focusing on the religious aspect, much of the perspective of time held by Judaism is similar to Islam (Birn, 2009). Jewish tradition also sees time as circular and determined by God. The future is determined by God and everything is “God willing”. Patience is also considered a virtue in Judaism and haste is not encouraged.

The Israeli secular society in contrast is characterized by the techno-western perception of time. Many sectors of religious Judaism have merged with science and business, eventually adopting this perception of time. As both techno western and secular attitudes towards time perspective can be seen within the Jewish-Israeli culture, Israeli society experiences a dialectical tension with respect to time. On the one hand, there is a secular, economic driven attitude towards time as a resource not to be wasted with an emphasis on the future oriented time perspective. While on the other hand, there is an approach to the Israeli-Palestine conflict that is characterized by a past time perspective and is deeply rooted in religion and tradition. This past perspective relates to the Jewish claim over the rights to the lands of their ancestors, made by God to the nations forefathers.

Here is an excerpt to the “Bar-Ilan speech” of Prime Minister Binyamin Netanyahu, addressing the policy of his government towards to negotiations. We can see the tension between the secular, future orientated and the religious, past oriented perspectives:

“Even when our eyes look to the horizon, our feet must be firmly planted on the ground of reality, of truth. And the simple truth is that the cause of the conflict was, and remains, the refusal to recognize the right of the Jewish people to a state of its own in its historic homeland” (Full text of Netanyahu's foreign policy speech at Bar Ilan. 2009).

So Why Can't We All Just Get Along?



It would appear that there is far too much focus on the past and that this is acting as a barrier to resolving the Israeli-Palestine conflict. Historical questions such as the origins of the Jewish and the Palestinian populations, and who has rights to the lands are putting both sides in the past perspectives and disabling them from looking towards the future and resolution. There is anger and resentment on both sides to contend with. The Arab refugee problem and the Holocaust are firm points of reference for either side when voicing grievances. However any historical debate is a barrier towards resolution as it prevents the focus from being on finding a creative solution and focusing on improving the future.

As we have discussed, different conceptualizations of time on both sides leads to discrepancies on the negotiation clock. Palestine adopts a slow, calm negotiation process and refuses to rush, while Israel pushes for fast conflict resolution, with the full weight of its “time is money” economic stance behind it. These contradictory time perspectives are further complicated but the non-uniformity of the Israeli time perspective, it being secular and religious at the same time.

Fundamentally, both cultures think in terms of past perspective, stagnating discussion about future resolution. A future oriented time perspective would be a fruitful one to adopt here to balance out all this past bitterness and negativity. Some researchers are certain that for negotiations to achieve a successful compromise, both parties much place their emphasis on the future (Fisher, Ury & Bruce, 1991). Here's for hoping both Israel and Palestine balance out their respective time perceptions and shift their focuses towards the future!

(http://24.media.tumblr.com/tumblr_m248zhrIJ91r5g67po1_500.gif)



Balanced Time Perspective & Mindfulness

A number of studies have investigated the relationship of balanced time perspective and mindfulness, generally suggesting that mindfulness can be an essential aspect to be able to improve subjective well-being. Drake et al. (2008) looked at time perspective and various correlates of well-being, and found significant correlations suggesting that those individuals who have a balanced time perspective are generally more happy and report higher levels of mindfulness.



Vowinckel (2012) argues that mindfulness is indeed an essential component necessary for any intervention aimed at achieving a BTP and improving subjective well-being. The logic behind this is that since we make decisions about both the past and future in the 'present', which is the domain of mindfulness. Therefore the more mindful, or reflective we are in the present will help us identify exactly how we engage with the various other time perspectives, judging the pros and cons, and be able to adjust where necessary. This suggests that future studies on mindfulness and time perspective should reveal the possibility of a therapeutic intervention aimed specifically at assisting individuals to learn to achieve a balanced time perspective, and thus to be happy and content (supposedly).

Taking this idea further, a recent study by Kramer et al. (2013) has investigated the effects of mindfulness meditation on time perception and found that it did indeed cause individuals to be attentive to the present and thus lead to a perception that time had slowed down (as evident by overestimating time duration). They argue that this type of intervention may help adjust the internal clock and thus affect time perception, however, future research must continue to identify the mechanisms by which this happens and how to calibrate the changes in perception to match what would be considered BTP with therapeutic benefits.

Even the 'main man' behind time perspective theory, Zimbardo, has suggested a possible intervention in his 2012 book "The Time Cure: Overcoming PTSD with the new psychology of Time Perspective Therapy", which was co-written by Richard Sword (expert in PTSD) and Rosemary Sword (a practicing clinical counselor) who both claim to have implemented time perspective therapy as a means of 'curing' PTSD in practice, with good results. However, it seems that this approach at this stage is more of a self-help routine without scientific basis (no empirical evidence supports this).

Stop & Think



Having gone through some of the research on Time Perspective and the possible ways it affects our lives at various levels (individual and cultural), it is necessary to stop and consider the possible limitations and gaps in the theory and literature on TP.

• Theory

- As is the case with much of psychological research, subjectivity is an issue that often causes inconsistencies in theory. The subjective measure of the Zimbardo Time Perspective Inventory should be taken with a grain of salt, i.e. one should consider the potential variability amongst different studies that utilize it.
 - Each sample is different, which may lead to variability in conclusions drawn from the studies.
 - Furthermore, the way in which the ZTPI is utilized is not clearly defined, with some studies only focusing on certain aspects rather than the entire spectrum.
 - e.g. different methods of finding what "balanced" is, depending on the sample used (Zhang & Howell (2013)).

• Applications

- it is not clear whether BTP has clinical application. The majority of research is critical of an unbalanced, biased, time perspective by suggesting the negative consequences it is correlated with, but few studies identify how a Balanced Time Perspective is the ideal.
- Few studies highlight the positive benefits associated with BTP, beyond mere correlations with life satisfaction and happiness measures.
- Future research should consider ways in which our knowledge of BTP can be applied to clinical or other applied settings.
- Also, research should focus on identifying ways in which a BTP can be achieved as a therapeutic intervention.

So, is it worth it?

YES! - Examining different time perspectives within cultures tells us about how people use time as a foundation to

structure their lives and how they relate to one another. Furthermore it provides insight into interpersonal relations and how incongruent time perspectives can cause conflict.

At an individual level, it provided valuable insight into how drastically it can affect our lives on a day-to-day basis.

We are creatures of time and since it inevitably affects our lives it is worthwhile to study.

"For us convinced physicists, the distinction between past, present, and future is an illusion, although a persistent one."

- Albert Einstein

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