



How Often Are We in the Here and Now?

Şerban Procheş

Discipline of Geography, University of KwaZulu-Natal, Westville Campus, PB X54001, Durban 4000, South Africa; setapion@gmail.com

Abstract: There is a conflict between humans' need to focus on the present circumstances and their ability to plan and reminisce, which often results in mind wandering. Contemporary techniques with ancient roots, such as mindfulness, are useful in solving some of the problems associated with excessive mind wandering but largely fail to recognize the importance of planning and reminiscing. This lack of recognition means that research has by and large ignored the need for a balanced approach, incorporating a focus on both the present local circumstances and elsewhere. Here, I scrutinize time use data to classify contemporary human activities, with an emphasis on leisure but also relevant in a work context. I classify activities according to their temporal and spatial profiles, while also noting any social components involved, which may further remove the activity focus from the self. A visual summary of this classification indicates that our activities, whether societally imposed on us or performed by choice, cover the full range of time-and-place focus profiles available to the human mind more or less evenly. This contradicts the prevalent paradigm, suggesting a dichotomy between present time-and-place focus and mind wandering. I suggest that individual differences in temporal and spatial focus profiles require both broad and in-depth study, such differences having the potential to help optimize not only individual well-being but also the functioning of society, and that mind wandering may be (at least partly) unnecessarily vilified.

Keywords: attention; leisure; mind wandering; mindfulness; time use



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1. Introduction

Humanity seems to be in a serious love–hate situation regarding being in the present. The way we commonly perceive it, the natural world surrounding us exists in the present tense, which would make being in the now a more natural thing for humans to do, too. Nevertheless, consciously living in the past or in the future is not uniquely human either. Animals are capable of, at the very least, remembering things and, to some extent, planning for the future, an ability associated with intelligence (Clayton et al. 2003; Beran 2014). Despite an overall positive relationship between intelligence and various measures of attention in humans (Schweizer et al. 2005), general intelligence (incorporating a strong time-awareness component) can also be at odds with attention (Bruner and Colom 2022), which more often than not requires a focus on the present.

In allowing for past and future tenses, human language formalized this sort of experience and made it possible to communicate it to others. From here, storytelling was merely one step away (Beach and Japp 1983; De Fina and Georgakopoulou 2015). Ever since this happened, living in the present—as opposed to the past or future—has been juxtaposed to other types of immediacy measures, such as staying mentally in the immediate geographic surroundings or being elsewhere, living uniquely in the self, living in interaction with those nearby, or living vicariously through the characters of stories of all kinds (Kordeš and Demšar 2021). This type of opposition has become interwoven with various other oppositions of a nature that contemporary society describes as religious (Gethin 1992)—auspicious and inauspicious, sacred and profane, and good and not so good. The precise links between different immediacy measures and their positive or negative connotations are far from straightforward, as any student of human religion would know.

To give but one much-commented-on example, we would currently associate the word ‘scripture’ with the sacred. However, it is possible that sacred information was, at one point in parts of the world, transmitted strictly verbally, even after writing had become available (Doniger 2009). Stories passed on from memory (the Sanskrit word for memory being *smṛti*) alone were sacred; that very same word, *smṛti*, meaning memory in Sanskrit, was often linked to remembering what the sages had said (Gethin 2015). This word later on became, in Pali, *sati*, a word commonly (albeit debatably) translated in English as mindfulness—the very essence of ‘living in the present’, as reflected in contemporary popular culture.

This brief mention of Sanskrit and Pali would be indicative of the route taken by ‘living-in-the-now’ to the place it likely holds for most readers. Indeed, various techniques aiming at focusing on the immediate—including something as narrow as one’s body, breathing, some object in the room, etc.—and ignoring more remote objects or thoughts have existed in Buddhist and Hindu philosophical schools for a very long time (Doniger 2009). This is despite the fact that the metaphysical and epistemic implications of such focus are very different (and, in some cases, diametrically opposed to each other) in Hinduism and Buddhism and substantially different even between different schools in each of these two major dharmic religions. Western philosophy has also made its own attempts at dealing with the question of being in the present or elsewhere; Heidegger (1927) expanded on this topic from some basic points made in Plato’s *Sophist*.

It would be difficult to discuss contemporary takes on being in the present without dwelling a bit longer on mindfulness. This is an approach incorporating awareness and observation, as well as other moderately well-correlated facets, which are not all relevant to being in the moment (Baer et al. 2006). Over the past thirty years, mindfulness has gained ample recognition in both psychological practice (Didonna 2009) and organizational theory/leadership (Scharmer 2009). There is evidence that practicing mindfulness can be useful in treating a variety of psychological problems (Brown and Ryan 2003; Baer et al. 2006), albeit this evidence is often taken out of context (Van Dam et al. 2018). The use of mindfulness in dealing with stress, worry, and rumination—all excessive cases of escaping the present time—should perhaps make one take a few steps back and recognize the undeniable benefits of planning and reminiscing, when these are kept under control (Baird et al. 2011). Even in their unstructured form, when labeled as mind wandering, such forays outside the immediate are exceptionally valuable and probably key components of humans’ mental activity.

These competing types of messages about the value of but also the dramatic limits imposed by being in the present require an integration. Very little is known about how much living in the moment—as opposed to targeted past or future focus, or simply mind wandering states—might be commendable. There is thus a whole new quantitative dimension to be added to this type of research.

One step in this direction would be a descriptive survey of the activities 21st century humans perform that are focused on the past, present, and future—and on our immediate proximity otherwise defined, spatially or socially. Far from drawing any definitive conclusions about what constitutes a balanced time-focus profile, a visual representation of such patterns should allow us to draw some preliminary conclusions and refine the set of potential futures studies needed for such an integration. This is the very humble aim of the present study.

2. Definitions and Sources

A first task to this end was clarifying the use of terms. Arguably, ‘now’ should have a narrower meaning than ‘the present’. ‘Now’ should ideally be adimensional and have no duration at all, but in practice, it appears that the term is most often used to denote things that are jumbled into a single event from a causality point of view. Such events typically happen over a time period of less than one second (Eagleman and Holcombe 2002). In a human everyday context, ‘the present’ most often refers to hours or, at most, days before or after the moment being referred to, although, in geological terms, it can refer to the entire

Holocene (going back over 10,000 years). For the purpose of this review, though, I will use ‘the present’ to mean anything between minutes and hours on the two sides of the moment of reference and ‘now’ to refer to things only seconds away (Figure 1).

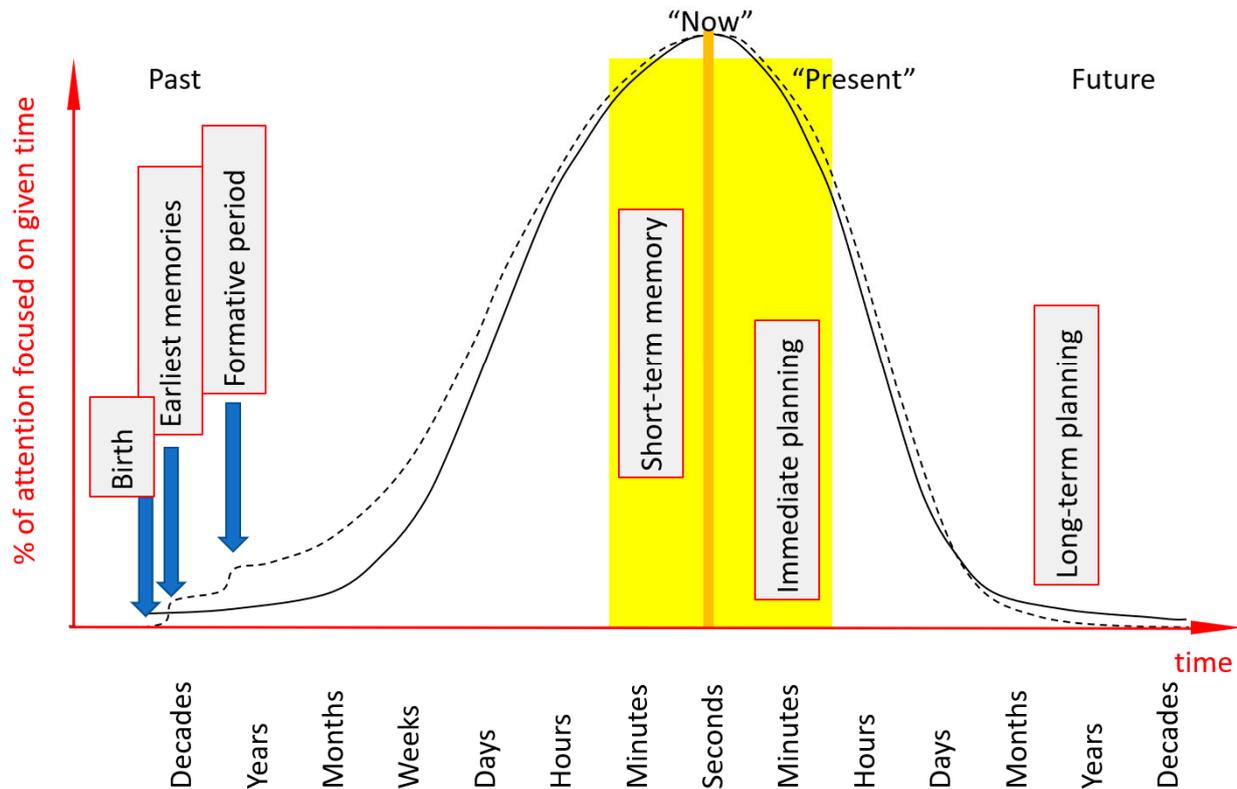


Figure 1. Defining and measuring the temporal focus of attention. A default log-linear distribution (Crovitz and Schiffman 1974), with less and less time dedicated to more and more distant time periods into the past and future (solid line), can be adjusted slightly to accommodate the absence of memories from a very young age and possibly one or more formative periods (Thorne 2000), when more memories than expected are recorded (dashed line).

The next task was finding sources on the time focus of mind activities, or, if detailed accounts to this effect were not available, sources for the time allocation for various human activities which can be categorized in terms of temporal mind focus. A general temporal framework for mind focus was identified in the work of Berntsen et al. (2015). Some details on the duration of specific activities classifiable according to time focus were derived from the time use data literature, primarily from Ortiz-Ospina et al. (2020), along with demographic variability information from Vagni (2020) and mind wandering studies (Killingsworth and Gilbert 2010). While these studies included activities classified as both work and leisure, work-related activities were found to be greatly diverse in terms of the temporal focus within one job description (Devine 2002). Thus, the present study was centered on leisure activities, while keeping in mind that the same mind processes are also applicable to work insofar as similar basic activities are performed. The selected activities were illustrated by subdividing activities according to (a) temporal focus, (b) spatial focus, and (c) social interactions and the involvement of the individual in driving the activity. Subsequently, this categorization was used to summarize overall present/past/future focus, here vs. elsewhere focus, and self vs. social focus for a semi-quantitatively time-weighted set of common categories of activities.

3. Framework and Activity Classification

As one would expect, one's mind tends to focus either on the present or on events in the past or future that are closer to the present. The distribution of such time values in the past is roughly log-linear (Crovitz and Schiffman 1974), and, more recently, a similar pattern has been shown for the future (Berntsen 2019). This general curve shape (Figure 1) is probably a useful average but is not necessarily representative for most individuals. It is conceivable that, if key moments occur at different ages in different people, or if data for people of different ages (who have passed key moments by different periods of time) are pooled, details relevant to different age groups are lost. Presumably, memories are preserved in fair numbers from an early age (childhood), immediately following the first such occurrences, and are possibly also in abundance from the teenage–young adult years, when lots of new experiences happen in quick succession (Thorne 2000), thus representing two possible deviations from the general shape of the curve (Figure 1). It is also likely that future focus seldom goes as far from the present as to focus on past events, due to our inability to predict events far into the future (Plimpton et al. 2015; Berntsen et al. 2015). At best, this is a very simple summary of temporal focus when considered alone. However, escaping one's immediate context takes other forms, such as removing oneself to a spatially remote location or putting oneself in someone else's situation—either by direct two-way interaction or by becoming unilaterally aware of their story. Thus, spatial and social dimensions need to be incorporated.

Two-dimensional plots of temporal vs. spatial focus are needed to illustrate activities that may have a clear focus in one dimension but may vary in terms of the other. For example, planning and reminiscing both have a clear temporal focus (future and past, respectively), but their spatial focus may be at the present location or elsewhere, meaning they are spatially diffuse. Activities such as yoga, mindfulness, and other forms of meditation may, in some cases, expressly seek a focus on the present moment, while in other cases, they may specifically attempt to transcend time; indeed, in some cases, the former is experienced as leading to the latter. (In Vipassana meditation, attention, albeit anchored in the present, can be attuned to past or future events that may arise; Lutz et al. 2008.) This, together with other basic time use categories such as sleep, suggested the addition of a fourth option on the time axis: an atemporal category that has to be added arbitrarily on the two-dimensional plot. I added this next to 'future' out of necessity, but it should ideally not be placed in line with the others. However, a third and fourth dimension can be added on top of the two-dimensional plot in the form of social interactions and the individual's level of involvement in driving an activity (Figure 2). Using this framework, leisure activities can be dissected further in terms of their focus.

Although work is often separated from leisure in time use research, the broad categories of mental focus during work largely overlap with those relevant to leisure, and leisure is arguably more all-encompassing (Vagni 2020). Furthermore, mind wandering during work-related activities can be partly equated to mental routines best described as leisure (Killingsworth and Gilbert 2010). In this context, I viewed a classification of leisure activities as the best way of presenting the temporal profiles of mental activities. Subsequently, I return to the work context when summarizing the findings resulting from this classification.

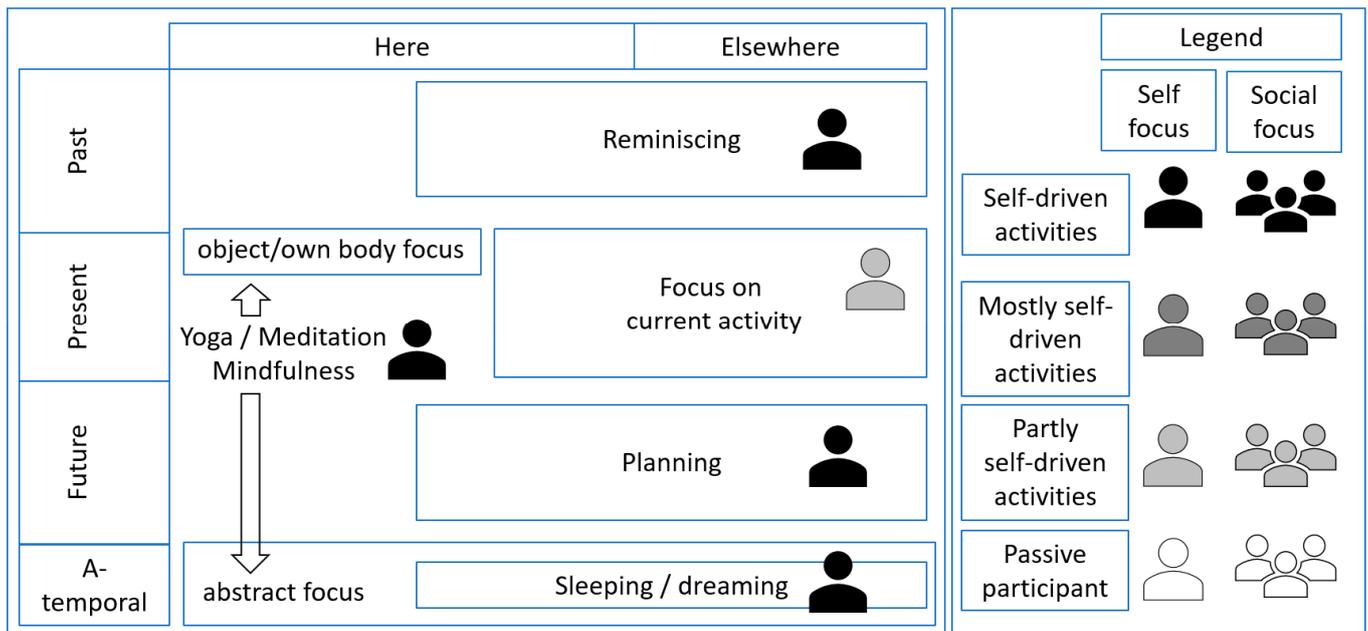
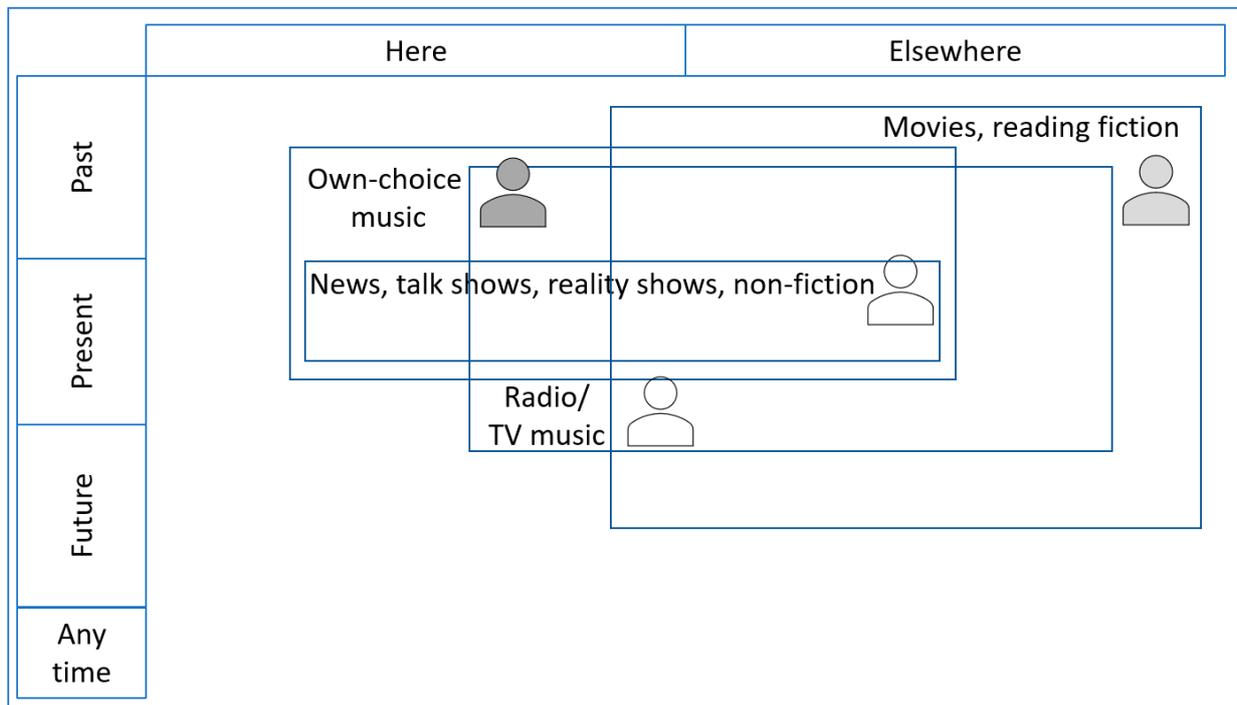
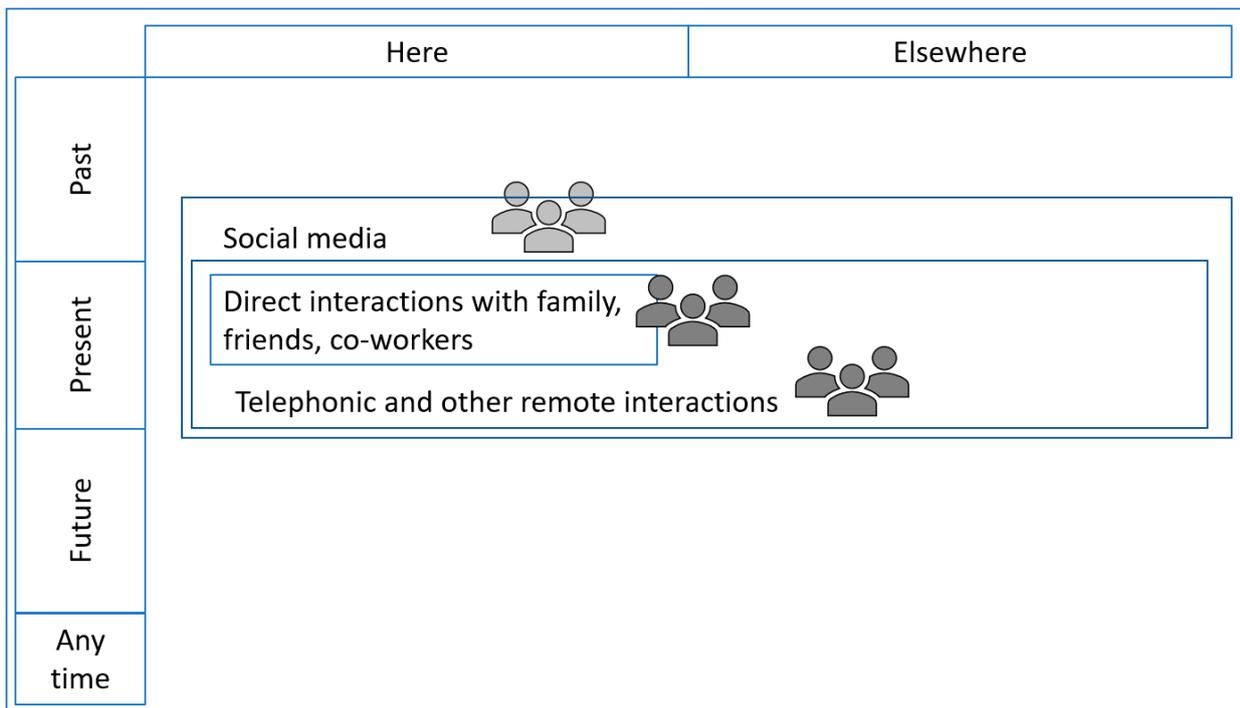


Figure 2. Schematic representation of the temporal, spatial, and social focus of attention, as illustrated in the following figures.

To start with, music and movies can be anchored in the present or past, and movies can occasionally be anchored in the future; however, the extent to which the individual drives the choice of this auditive (and visual) content depends on whether these are played on a device or simply followed from continuous-stream sources such as radio and television (Figure 3a). Activities that are focused on social interactions are typically present-centered, with some allowance for catching up on an event that happened in the recent past, mostly in the form of social media. Face-to-face interactions, currently decreasing in importance globally, are spatially localized, whereas remote ones such as phone calls and social media, which are on the rise, can span a range of spatial arrangements (Figure 3b), although there is still a space dependence, with most contacts being located closer rather than farther (Lengyel et al. 2015). Far more past-focused are activities revolving around photos, recordings, and scrapbooks; even the act of recording sound or images in the present, albeit present-focused (Figure 3c), arguably partly removes one’s attention from what is being recorded to the act of recording. One of the most clearly present-focused types of leisure is sport, with the exception of cases in which one watches recorded events, which can also be from different locations. More variable in this case are the social component and the level of choice, which differ depending on the number of individuals involved in the activity (Figure 3d). The anticipation involved in sport, and in other activities, too, may also be interpreted as a future focus. As with the temporal-only patterns in Figure 1, these temporal, spatial, and social allocations can be viewed, at best, as averages and would need to be substantiated with data in targeted studies.

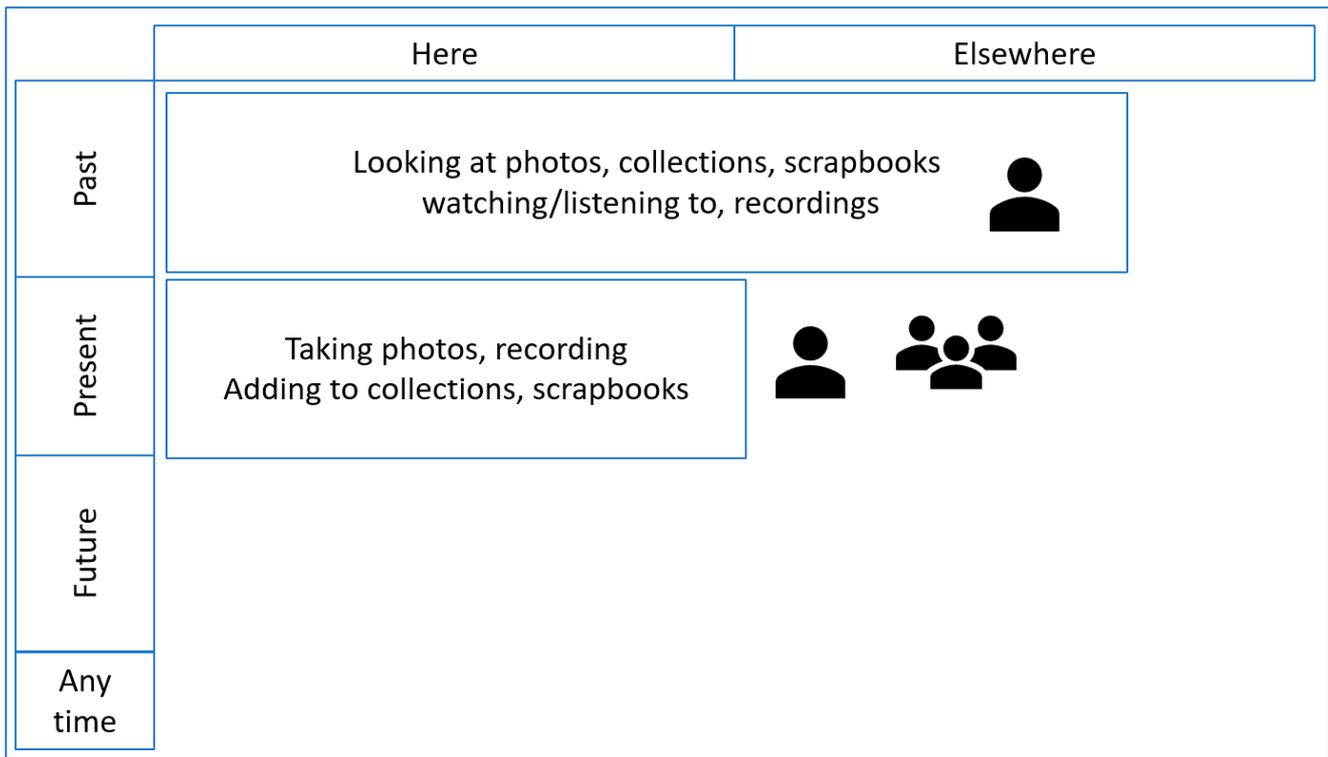


(a)

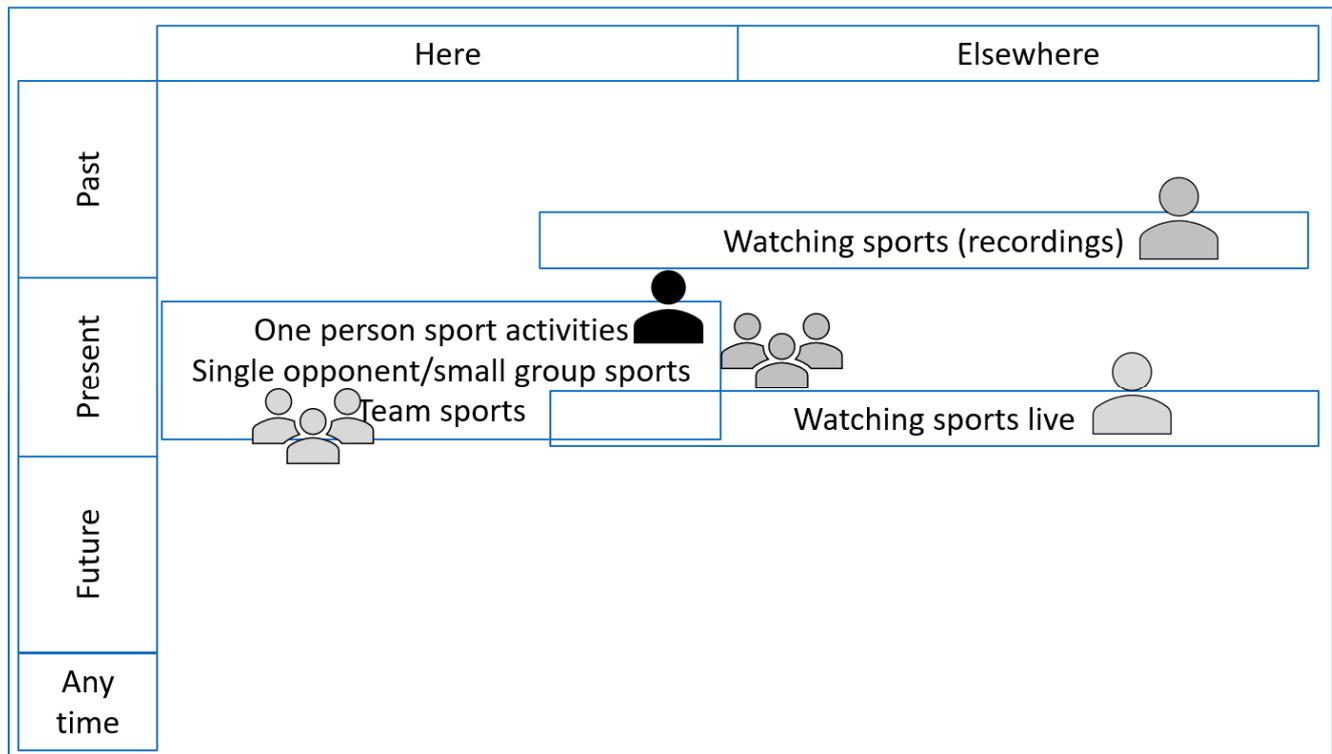


(b)

Figure 3. Cont.



(c)



(d)

Figure 3. (a–d) A classification of leisure activities according to their temporal, spatial, and social focus.

A summary of all such activities, this time incorporating work-related ones, reveals a complex picture in which present-, local-, and self-focus combine with the attention placed elsewhere in almost equal proportions. Most broad time use categories include

sub-categories involving or not involving social interactions—few or many and meaningful or less so. These, in turn, may have a local or remote focus, a focus on the past, present, or future, or combinations thereof (Figure 4).

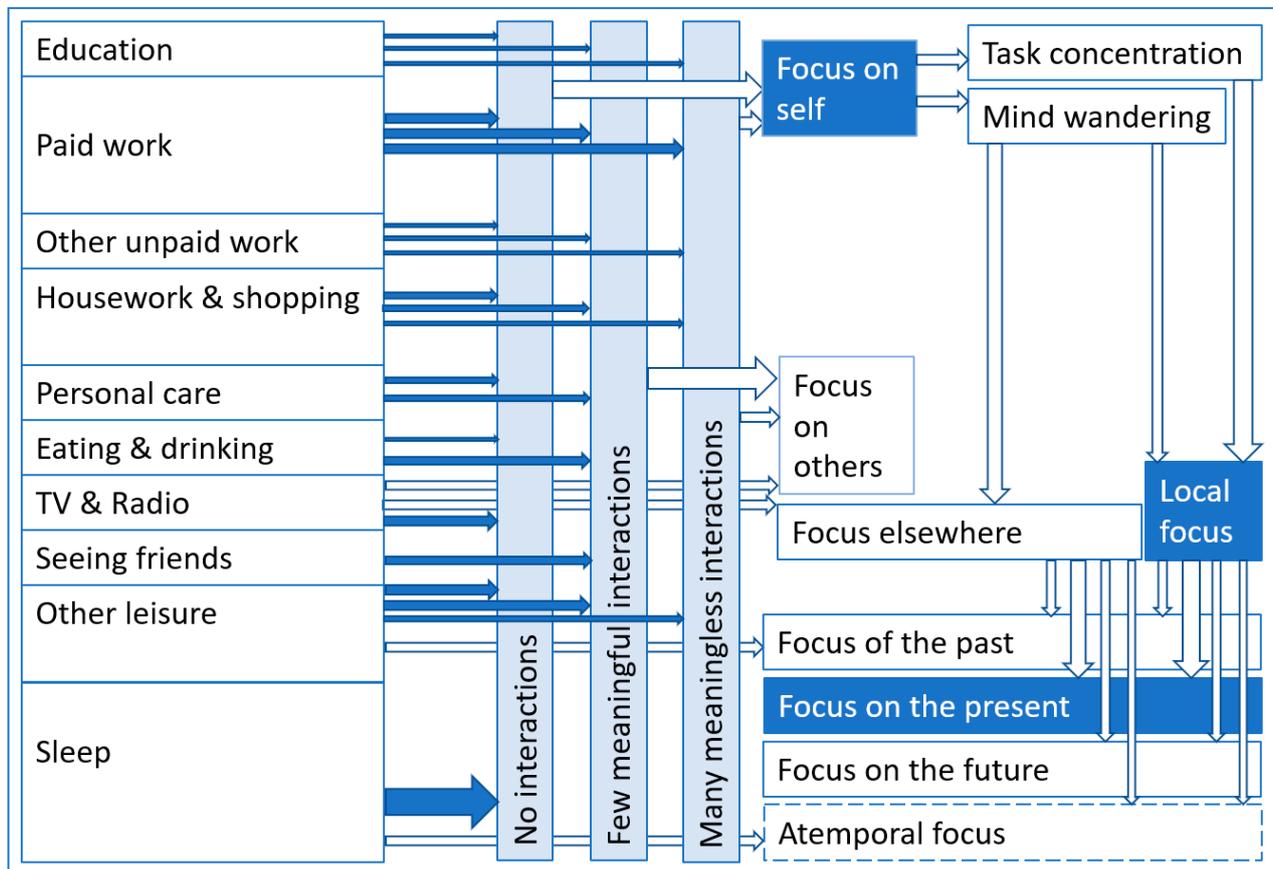


Figure 4. Summary of how common daily activities fit onto the temporal, spatial, and social focus dimensions. While the activities in the left-hand column are roughly weighted according to the time allocated daily by an average person (Ortiz-Ospina et al. 2020), data that are needed to weigh the other blocks are lacking.

4. Discussion

As seen from the very crude summary provided above, projecting one’s mind into the past or future, or in an atemporal imaginary space, is essential to humans (probably all humans) for both using the past to define one’s own identity and for planning purposes.

While time use data are widely available for a variety of countries, by gender and age groups (Ortiz-Ospina et al. 2020; Vagni 2020), mind wandering means that this type of data are of limited use in quantifying the time spent focusing on the past and future. In this context, the very brief article of Killingsworth and Gilbert (2010) is important—indeed, central—to the questions asked here. Their work shows, fairly convincingly, that (1) the human mind wanders a lot, during nearly all activities, (2) there is an association between mind wandering and a decreased perceived level of happiness, and (3) this seems to be a case of mind wandering leading to decreased happiness, rather than unhappy people having minds that wander more to start with.

These are valuable pieces of information, but they lead to even more questions, which do not appear to have been suitably answered since. What about individuals who may, in fact, feel typically happier when their mind is wandering? What about specific types of mind-wandering that may make most individuals happier? Has mind wandering been always associated with reduced happiness through history, or could it be that this association is a symptom of the modern world (Borgmann 1992)? There is little doubt that

the essence of human nature can be persuasively linked both to rationalizing and to being in the present. It is therefore reasonable to posit that happiness has to do with achieving a balance between the two and that the contemporary world tends to upset such a balance in multiple ways. For example, advertising often employs a future time perspective, the effectiveness of which is age-dependent (Kuppelwieser and Sarstedt 2014).

Mind-wandering may be related to purposeful planning and recollection in a complex way, whereby the latter two may stimulate more unintended mind wandering, but in some cases, mind wandering may also compensate for the absence of intentional past and future focus (Cole and Kvavilashvili 2021). Mind wandering may thus have its own form of healing value (Baird et al. 2011), despite attempts to heal mind wandering using mindfulness (Mrazek et al. 2012). Elaborating further on the purported benefits of mindfulness, there are indications that not only individual but also societal practices may be responsible for enhanced mental health, at least among those who practice Buddhism (Wongpakaran et al. 2022). Attention needs to also be given to what exactly the sense of happiness in the study of Killingsworth and Gilbert (2010) is really about. Specifically, which of the fundamental human needs are disrupted in a situation perceived as involving reduced happiness, and which are in fact satisfied but whose satisfaction is obstructed by a lack of satisfaction in others? Is it possible that some needs might even benefit from mind wandering, even in this overall dissatisfied state, but, as above, this goes unnoticed because of the overwhelming impact of unsatisfied needs? It is possible to attend to those needs that are not satisfied during mind wandering while wandering nonetheless? Trying to untangle such matters would depend on the needs framework employed. Maslow's (1943) approach, highly popular with the general public but heavily criticized within the psychological community, offers the vague yet powerful 'self-actualization' category, which is not well matched in the workplace-focused (Herzberg et al. 1959) or other general schemata (Max-Neef et al. 1989; Doyal and Gough 1991). Nevertheless, a workplace context would be of great interest in an organizational psychology context. Unpacking a general needs categorization could provide insights into what exactly is gained, and what is lost, by living in the present.

The self/others dimension is undoubtedly also changing. Contemporary society allows for a level of self-sufficiency seldom seen in the past. In a sense, this is a move in the opposite direction from the increasingly de-localized and de-presentized contemporary mind focus, allowing for greater immediacy. At the same time, though, it may lead to an equally imbalanced profile between the 'immediate' and the 'other' by losing out on the arguably very important social component. Much has been written about technology leading to social alienation in research but even more so in memes paradoxically circulated on social media. Even within the range of available technology options, the move from media meant for consumption by broad segments of the society (locally or regionally) to individually customized options allows for greater individuality and self-focus, albeit often in a more global and less local/regional context (Kuroda et al. 2022). This highlights the complex, patchwork nature of contemporary change in an immediacy vs. 'other' context.

A special case needs to be made for planning and memories. Memories are essential to happiness, especially later in life. There is, however, no agreement on the amount of time one should dedicate to the making of memories and, subsequently, to reminiscing in each life stage. Modern humans' ability to produce large numbers of mediated memories (Van Dijk 2007) may be negatively impacting the creation of fewer, but perhaps more meaningful, direct memories. This recently acquired ability may even have an impact on living in the moment, even if that moment is to never be remembered. To give a qualitative example, is it better, in the long term, to have taken a picture or simply to have admired that which we could have taken a picture of? Moving to the quantitative, how many pictures should one take to have something to enjoy later while at the same time living that period of one's life in the moment? Planning is presumably equally important, but mostly at earlier stages. There may be room here for some form of stock taking, as parallel to reminiscing.

The issue of living in the moment also needs to be linked to consciousness. Besides the hard problem of consciousness per se (Seth 2021), perhaps more relevant here are aspects such as multiple activation, complexity, and synchrony, as well as attentional limitations and the consciousness–unconsciousness opposition, which are all relevant to dividing attention between multiple activities at any given moment. (O'Brien and Opie 1998; Zeki 2007; Seth et al. 2008). Given the possibility of multiple attention foci, perhaps the question is not whether, at one given point, one is in the present or otherwise, but rather how pervasive are the neural activities pertaining to a focus on these different time components. Also relevant here seem to be the latest developments linking consciousness and short-term memory (Budson et al. 2022), although much remains to be understood on this topic.

All in all, the diversity of temporal, spatial, and social profiles associated with different activities paints a picture in which there is no clear dichotomy between living in the present circumstances and elsewhere; in fact, although fully quantitative data would be needed to certify this, there appears to be a continuum of temporal and spatial attention profiles. On an individual but also societal level, perhaps the main question is whether a one-size-fits-all approach is at all useful. All individuals cannot be expected to spend similar amounts of time focused on the here and now, and perhaps not all are inclined to contribute to in-depth planning beyond their own sphere of direct interests. We already know that a social stratification exists in terms of time use, and it seemingly provides for a functional society (Vagni 2020). While this may not be ideal for all the individuals involved, there should be little doubt that some are choosing their profession based on the time focus they find they can fit in with. I have argued elsewhere (Procheş and Gerwel Procheş 2015) that individuals with diverse skills make for a more functional tertiary education landscape. Similarly, I believe that individuals with diverse temporal and spatial focus profiles make for a happier and more functional society. Research may reveal that such a balance has historically existed and suggest ways to make sure it is not being lost.

Ultimately, once a thorough description of temporal profiles at individual and societal levels is achieved, one will have to return to the roots of mindfulness. To answer the question asked in the title of this paper is not simply a matter of collecting quantitative information about large populations but is a hard ontological one as well, considering the different types of meditation and their relationship with the present. This aspect may be impossible to quantify using the criteria applied here, and potentially transcends the reach of other available research instruments.

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