

## ePub<sup>WU</sup> Institutional Repository

Wolfgang Fellner

The Value of Time: Its Commodification and a Reconceptualization

Article (Published)  
(Refereed)

*Original Citation:*

Fellner, Wolfgang (2017) The Value of Time: Its Commodification and a Reconceptualization. *Eidos. A Journal for Philosophy of Culture*, 2. pp. 37-53. ISSN 2544-302X

This version is available at: <http://epub.wu.ac.at/5958/>

Available in ePub<sup>WU</sup>: December 2017

ePub<sup>WU</sup>, the institutional repository of the WU Vienna University of Economics and Business, is provided by the University Library and the IT-Services. The aim is to enable open access to the scholarly output of the WU.

This document is the publisher-created published version.

DOI: 10.26319/2914

Wolfgang J. Fellner  
Department of Socioeconomics,  
Vienna University of Economics and Business

## The Value of Time: Its Commodification and a Reconceptualization<sup>1</sup>

### Abstract:

The discourse about commodification of time indicates that under the current socio-economic regime important values get systematically ignored. This paper reviews literature about the value of time in classical political economy, neoclassical economics, the household production approach, household economics, and activity models. Starting with neoclassical economics, all these approaches are largely in accordance with utilitarian methodology. Utilitarian methodology turns out to be incapable of explaining the value of time. The debate about “quality work” allows us to identify the following intrinsic values: power, playfulness, a sense of meaning, and a sense of belonging. These intrinsic values match with the “five sources of motivation” in contemporary psychological research, which confirms the empirical relevance and irreducibility of these values for understanding behavior. We propose a definition of commodification of time and illustrate some of the potential effects of commodification of time.

### Keywords:

economic methodology, theory of value, motivation, restlessness, identity, playfulness, power.

Economic concepts and ideas can have a powerful impact on culture and lead to substantial cultural change. Especially Neoliberalism is an illustrative example for this phenomenon.<sup>2</sup> Even though featured much less

---

1) I am very grateful for all the effort and support from the editor of this journal. The suggestions received from the anonymous reviewer and comments from Clive L. Spash, Peter E. Earl, and Marco Paulo Vianna Franco helped to improve the article substantially.

2) The numerous books of Philip Mirowski on Neoliberalism provide deep insights into this topic.

prominently in scientific and public debate, the term “commodification” highlights cultural issues around production orientation and the resulting cultural change. “Commodification” is usually defined as the transformation of goods, service, ideas, and people into commodities, or objects of trade. In this paper we deal with commodification of people or put differently, the commodification of life’s time. Life’s time can be defined as relevant features of activities for somebody. This definition contains the perception of time, often described as human time<sup>3</sup>, as well as other features of activities. Throughout this article, we use the notion of time in the sense of life’s time.

Commodification of labor has been at the centre of classical political economy. Karl Marx identified one of the main characteristics of capitalist political economy to be the historical struggle of capital to increase control over labor. Karl Polanyi talks about labor as a fictitious commodity. He argues that “land, labor and capital had to be transformed into commodities in order to keep production going.”<sup>4</sup> Polanyi further claims that as a result of this drastic cultural transformation “human society had become an accessory of the economic system.”<sup>5</sup>

Besides commodification of labor, the notion of commodification can be found in relation with a broad range of other realms of human life. A recent article published in *Ageing and Society* addresses commodification of life’s time in the discourse on active aging.<sup>6</sup> The authors identify a predominant production-oriented view of active aging, advocated by the Organization for Economic Co-operation and Development (OECD), which focuses on labor-force participation and a more comprehensive view, advocated by the World Health Organization, that includes participation in social, economic, cultural, spiritual, and civic affairs.<sup>7</sup> They identify a tension between commodification and existential life priorities that obscure the potential for a long life.

Various academic disciplines as well as works of fiction deal with the commodification of time as a fundamental change in individuals’ perceptions of life and social relations. Michael Ende’s novel *Momo* (1973) provides a powerful image of how comprehensive and pervasive the effects of commodification of time are for culture.<sup>8</sup> In their reflection on *Momo*, Linda Goodhew and David Loy interpret commodification as the result of a change in life’s rhythms. The rhythms of social relations and task-based work are replaced by the uniformity of clock-time.<sup>9</sup> Edward Palmer Thompson argues, in his very well-known paper, “Time, Work-Discipline, and Industrial Capitalism” (1967) that this change in rhythms results from the necessities of organizing industrial production: “time is now currency: it is not passed but spent”.<sup>10</sup> The uniformity of clock-time neglects the social time representing values beyond exchange of labor power.<sup>11</sup> In a more recent article, published in *Philosophy of Management*, Alan Tuckman shows how blurring the boundary between free time and working time leads to commodification of time. Technical developments like laptop computers and new working arrangements contribute to a perception of time as something that has to be saved.<sup>12</sup> The argument that capitalist modes of

---

3) Daniel Corrie, “What Is Human Time?” *The Hudson Review* 54, no. 1 (2001): 61–71.

4) Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 1957/1944), 79.

5) *Ibid.*, 79.

6) Simon Biggs, Michael McGann, Dina Bowman, and Helen Kimberley, “Work, Health and the Commodification of Life’s Time: Reframing Work–Life Balance and the Promise of a Long Life,” *Ageing and Society* 37, no.7 (2017): 1458–83.

7) *Ibid.*, 1462.

8) Michael Ende, *Momo* (New York: Penguin, 1986/1973).

9) Linda Goodhew and David Loy, “Momo, Dogen, and the Commodification of time,” *KronoScope* 2, no.1 (2002): 101.

10) Edward Palmer Thompson, “Time, Work-Discipline, and Industrial Capitalism,” *Past & Present* 38, no.1 (December 1967): 43.

11) Alan Tuckman, “Employment Struggles and the Commodification of Time: Marx and the Analysis of Working Time Flexibility,” *Philosophy of Management* 5, no. 2 (2005): 47.

12) Tuckman, “Employment Struggles,” 55.

production spill over into how time is perceived in general, encourages a restlessness that “makes it physically difficult not to be engaged in either production or consumption.”<sup>13</sup>

Dealing with highly relevant cultural phenomena, this literature implies that commodification of time is a threat to important values. In order to contribute to the conceptual understanding of commodification of time and its potential cultural effects, this article examines intrinsic properties of activities and the value of time.

In section 1 we discuss concepts of value in economics and show how they relate to various concepts of the value of time. This section illustrates the necessity to reconceptualize the value of time. Section 2 identifies several ignored intrinsic properties of activities and turns away from the value monism of utilitarian methodology in favor of a pluralistic concept of value. The identified intrinsic properties of activities feed into a new concept of value. In section 3 the proposed concept of value is contrasted with sources of motivation in psychological literature, in order to test the relevance of the identified intrinsic values and learn more about their properties. We suggest a definition for commodification of time. Potential effects of commodification of time are identified and discussed. Section 4 concludes.

## 1. Literature about the Value of Time

### 1.1 The Value of Time in Classical Political Economy and Neoclassical Economics

In classical political economy (CPE) the origin of value lies in the production process. Labor is seen as the source of economic value, hence the term *labor theory of value*. The restriction to economic value in CPE is crucial because it limits the scope of analysis.<sup>14</sup> Labor serves a threefold function in the economic process. It creates commodities, it determines their value, and it is seen itself as a commodity. The value of labor is described in terms of its use-value and its exchange-value. While the exchange-value of labor is represented by the wage rate, its use-value remains opaque, especially if interpreted as exchange-value plus value-added. The debate about the value of labor can be seen as one of the main issues in CPE.

Contrary to CPE, the origin of value in neoclassical economics (NE) stems from the consumption process. Value lies in the capacity of commodities, i.e., goods and services, to yield utility. In NE value is completely detached from what is happening in the factories. Utility is the only intrinsic value, and utility-seeking individual behavior is at the heart of “utility theory of value” and utilitarian methodology. In contrast to the labor theory of value, this type of value monism pretends to be all inclusive. Environmental or social values do not exist independently of individual utility. That economics as an empirical science builds on an immeasurable concept of value (i.e., utility) posed serious problems, which caused several shifts in the interpretation of utility over time. The “cardinalist approach” to utility and value was superseded by an “ordinalist approach” and a “behavioralist approach.”<sup>15</sup> The ordinalist approach follows the original interpretation of utility and value as feelings of pleasure or hedonic happiness. The behaviorist approach relates value to choice. Under the assumption that pleasure-seeking is the only human motivation, the conceptualization of value in both approaches coincides.

William Stanley Jevons’s disutility theory of labor conceptualizes the value of time in NE. Life is split into two categories of time use: work and leisure. Work yields negative utility based on its irksomeness.

---

13) Jeff Noonan, “Free Time as a Necessary Condition of Free Life,” *Contemporary Political Theory* 8, no.4 (2009): 387.

14) “Labor is not the source of all wealth. Nature is just as much the source of use values ....” Karl Marx, *Critique of the Gotha Programme* I.

15) Ivan Moscati, “History of Consumer Demand Theory 1871-1971: A Neo-Kantian Rational Reconstruction,” *European Journal of the History of Economic Thought* 14, no. 1 (2007): 119–56.

Leisure yields positive utility. Ignoring the production of goods and services, work destroys value, i.e., leisure. The only reason to work lies in the utility generated by the resulting purchasing power. Behavior is conceptualized as the maximization of a utility function consisting of leisure and products. The individual wage rate is interpreted as the value of work, determined by the shadow price of leisure. It is important to recognize that in the neoclassical labor market model the value of leisure determines the value of work. Work as a “bad” and leisure as a “good” are treated like any other commodity in the analysis – presupposing perfect substitution. Contrary to CPE, which only considered labor, time is now fully taken into account and conceptualized in a framework of production and consumption that only allows for two homogeneous categories of time use: work and leisure.

## 1.2 The Value of Time in the Household Production Approach

In “A Theory of the Allocation of Time” Garry S. Becker presented a fundamentally different view of time-use and the value of time.<sup>16</sup> Even though remaining in the utilitarian neoclassical tradition Becker’s approach implies a completely different concept of time. He redefines the meaning of “commodity”: “Households will be assumed to combine time and market goods to produce more basic commodities that directly enter their utility functions. One such commodity is the seeing of a play, which depends on the input of actors, script, theatre and the playgoer’s time; another is sleeping, which depends on the input of a bed, house (pills?) and time.”<sup>17</sup> According to this definition commodities are no longer objects of trade, exchanged in the market. They can be anything for which people use their time and money. Leisure as a separate category of time-use that enters the utility function no longer exists. This implies that time does not yield any intrinsic value. Time is an instrumental value, conceptualized as an input into commodities. Put differently, time is work in the sense that it has to be used productively. The less time is necessary for the “production” of commodities the better. The only remaining intrinsic property of time-use is its capacity to produce. Life is conceptualized as production. Consequently, Becker’s conceptualization of household behavior is referred to as the *Household Production Approach*.

Another important feature of time in Becker’s model is perfect substitution between time and money. Put differently: time is money.<sup>18</sup> Technically, this feature is represented in the way time appears in the model. No category of time-use and no activity appears in the utility function. In analogy to income, time is conceptualized as a constraint. Becker merges time and income constraint into what he calls the “full income constraint.” “There is, however, really only one basic constraint: [the income constraint, equation 6](6) is not independent of [the time constraint, equation 7] (7) because time can be converted into goods by using less time at consumption and more at work.”<sup>19</sup> This means that the intrinsic properties are homogeneous over all activities (e.g. paid work, sleeping or seeing a play). According to this homogeneity, Becker argues that the value of time is the same for all activities and equals the individual wage rate. At this point it is important to recall that the existence of an individual wage rate in NE hinges on the intrinsic value of leisure. But Becker denies in his paper the

---

16) Garry S. Becker, “A Theory of the Allocation of Time,” *The Economic Journal* 75, no. 299 (September 1965): 493–517.

17) Becker, “Allocation of Time,” 495.

18) Feminist economists like Nancy Folbre have opposed this methodology and particularly criticised the commensurability assumption and the resulting ‘time is money’ metaphor. This critique implies that the intrinsic properties of activities are not properly captured. Nancy Folbre, “A Theory of the Misallocation of Time,” in *Family Time: The Social Organization of Care*, ed. Nancy Folbre and Michael Bittman (London: Routledge, 2004), 7–24.

19) Consumption typically refers to the use and/or destruction of products and services. Becker describes the use and/or destruction of products and services in his definition of commodities as production. Consequently, the meaning of the term ‘consumption’ in the previous quotation remains opaque and has to be clarified. Becker, “Allocation of Time,” 496–97.

existence of leisure as a separate category of time-use: “What, then, is the relation between our analysis, which treats all commodities symmetrically and stresses only their differences in relative time and earning intensities, and the usual analysis, which distinguishes a commodity having special properties called ‘leisure’ from other more commonplace commodities? ... [L]eisure consists entirely of forgone earnings and the cost of other commodities entirely of goods.”<sup>20</sup> Denying the intrinsic value of leisure and reducing it to forgone earnings of wage income translates into a serious logical problem. The value of labor and its price (i.e. the wage rate) is not defined. This is particularly problematic since the wage rate is the most important variable for explaining behavior in Becker’s model.

### 1.3 The Value of Leisure and the Work-Leisure Dichotomy

The dichotomy of work and leisure in NE has been criticised for not acknowledging that work is not exclusively carried out in the form of paid work. The political aspect of categories of time-use becomes particularly visible in relation to the category “housework”. Since housework has a strong gender bias and is still predominantly carried out by women, the introduction of this category of time-use makes the economic role of women more visible. It also acknowledges that value-creation is not restricted to the formal (and informal) economy but expands into the household. Three activities (i.e., Paid Work-Housework-Leisure) have been employed in models for theoretical as well as empirical studies.<sup>21</sup> These models use a NE methodology and conceptualize paid work and housework as disutility. They share the same intrinsic property and value. Their only difference is that one is paid and the other unpaid. This leaves us with two categories of time-use that are unpaid: housework and leisure.

How can we know if what people do outside paid working time is housework or leisure? For example, child care is almost always classified as housework in economic literature.<sup>22</sup> It seems to go unrecognized that this implies a very strong assumption about someone’s emotional perception of being with (one’s) children. If another person can be paid to provide the service or not is completely irrelevant here, since the defining criteria of housework (i.e., its intrinsic property) is its emotional analogy to paid work. Other potential intrinsic properties like bonding, or the quality of the relationship with one’s children are given no intrinsic value.<sup>23</sup> In an utilitarian methodology those aspects can be seen as instrumental values, which might or might not contribute to intrinsic value in the form of hedonic pleasure.

Another way of solving the “housework or leisure classification problem” would be to clarify the concept of leisure and its intrinsic properties. In the literature about time-use leisure is often defined as a category that comprises all freely chosen, intrinsically satisfactory activities.<sup>24</sup> This definition presupposes that freedom of choice and intrinsic properties of activities are subjectively determined according to utilitarian methodology.<sup>25</sup> Since subjective properties (i.e., preferences) are treated exogenously in utilitarian methodology, nothing

---

20) Becker, “Allocation of Time,” 502.

21) Reuben Gronau, “Leisure, Home Production, and Work-The Theory of the Allocation of Time Revisited,” *Journal of Political Economy* 85, no. 6 (December 1977): 1099–1123.

22) Sergio Jara-Díaz and Jorge Rosales-Salas, “Beyond Transport Time: A Review of Time Use Modelling,” *Transportation Research Part A: Policy and Practice* 97 (2017): 211.

23) Kenneth W. Stickers, “Economies of Gift: Their Philosophical Principles,” Association for Heterodox Economics, Manchester, U.K., 10 July 2017

24) Jara-Díaz and Rosales-Salas, “Beyond Transport Time,” 215ff.

25) Wolfgang J. Fellner and Clive L. Spash, “The Role of Consumer Sovereignty in Sustaining the Market Economy,” in *Handbook of Research on Sustainable Consumption*, ed. Lucia A. Reisch and John Thøgersen (Edward Elgar Publishing, Inc., 2015), 394–409.

can be said about the concept of leisure and its relation to intrinsic value without departing from utilitarian methodology.<sup>26</sup>

Several scholars have proposed definitions of leisure in terms of objective intrinsic properties or technical features of activities. In *A Theory of the Economics of Time* A.C. DeSerpa suggested understanding leisure as freedom from work and proposed an empirical approach. If people allocate more time than required for the consumption of any particular good, the respective activity is a leisure activity.<sup>27</sup> Despite the difficulty in conceptualizing activities as consumption of particular goods this definition seems empirically infeasible also for another reason. It presupposes that all production is a completely standardized process that resembles an assembly line, operating at a technically determined speed, irrespective of the individual. Allowing for differences in productivity would imply that low productivity of non-paid work activities are misinterpreted as leisure.

In a recent review of time-use modelling Sergio Jara-Díaz and Jorge Rosales-Salsa suggest a two step procedure to identify leisure activities objectively. The first step consists of Margaret G. Reid's "third party rule", a test that allows for the separation of production from consumption and social activities: "if an activity is of such character that it might be delegated to a paid worker, then that activity shall be deemed productive."<sup>28</sup> The second step identifies leisure activities as a subset of unproductive activities: "all activities that we cannot pay someone else to do for us and that we do not have to do at all if we do not wish to."<sup>29</sup> This definition delivers a set of activities that can clearly be classified as leisure. However, it is unable to deliver a complete set of leisure activities since the fact that an activity is productive does not ensure that it is not a leisure activity. "Productive" does not imply "production", which is intrinsically linked with disutility in utilitarian methodology. Jara-Díaz and Rosales-Salsa themselves provide an example for this limitation: "For example, cleaning the pool in summer could be unpaid work to one individual and leisure to another."<sup>30</sup> Cleaning the pool is obviously an activity that might be delegated and hence productive. The definition fails to avoid the subjectivity trap of utilitarian methodology for activities that are productive but not production.

Another suggestion to conceptualize leisure draws on the concept of "subsistence needs."<sup>31</sup> "Some sociologists define leisure as the time that is available after subsistence needs are covered."<sup>32</sup> This definition is closely related to the idea of leisure as a residual category of time-use, or as "discretionary time", understood as time beyond what is necessary to attend to required functions.<sup>33</sup> This approach either shifts the problem to specify the intrinsic properties of "required functions" or it has to presuppose that the intrinsic properties of the other

26) Defining leisure as a group of activities presupposes that intrinsic properties of activities are constant and do not depend on situational factors: "The same individual participating in the same activity may consider it to be leisure at one particular time or location, whereas at another time or location he or she may consider it to be work, or at least non-leisure (Shaw, 1982). Other situational factors which may affect the definition of the activity include the day of the week, the duration of the activity and the presence or absence of other people." Jara-Díaz and Rosales-Salas, "Beyond Transport Time," 216.

27) A. C. DeSerpa, "A Theory of the Economics of Time," *Economic Journal* 81 (1971): 834.

28) Margaret G. Reid, *Economics of Household Production* (J. Wiley & Sons, Inc., 1934), 11.

29) Michael Burda, Daniel S. Hamermesh and Philippe Weil, *Total Work, Gender and Social Norms*, NBER Working Papers 13000, National Bureau of Economic Research Inc., 5. Cited in Jara-Díaz and Rosales-Salas, "Beyond Transport Time," 216.

30) Jara-Díaz and Rosales-Salas, "Beyond Transport Time," 215.

31) Wolfgang Fellner and Benedikt Goehman show that a needs-based approach to value is methodologically fundamentally different from the utilitarian methodology. Wolfgang J. Fellner and Benedikt Goehmann, "Human Needs and the Measurement of Welfare," SRE-Discussion 2017/07, [www.sre.wu.ac.at/sre-disc/sre-disc-2017\\_07.pdf](http://www.sre.wu.ac.at/sre-disc/sre-disc-2017_07.pdf)

32) Jara-Díaz and Rosales-Salas, "Beyond Transport Time," 215.

33) Robert E. Goodin, James M. Rice, Michael Bittman and Peter Saunders, "The time-pressure illusion: discretionary time vs free time," *Social Indicators Research* 73, no. 1 (August 2005), 43-70. Cited in Jara-Díaz and Rosales-Salas, "Beyond Transport Time," 215.

categories of time use (at least paid work and housework) are known.<sup>34</sup> Jara-Díaz and Rosales-Salas argue that there is also no consensus about the meaning of “necessary time.”<sup>35</sup> Even under the assumption of leisure as a category of time-use that has homogeneous, intrinsic properties with constant value, the literature provides no answer for how to identify a comprehensive set of leisure activities in terms of objective intrinsic properties.

#### 1.4 The Value of Tertiary Activities

Another technical intrinsic property of activities allows identification of what has been referred to as “tertiary activities”. Tertiary activities can be defined as those activities “we cannot pay other people to do for us but that we must do at least some of.”<sup>36</sup> Expressed in everyday language, one could speak of “reproduction activities.” The distinguishing intrinsic property is that those activities cannot be ceased completely. Activities often referred to as “tertiary activities” are eating, sleeping, personal care, and transport. It is our conviction that these activities are unable to be classified as either production/disutility or consumption/utility since they are too closely tied to someone’s identity, making it impossible to describe them comprehensively in terms of these kinds of functionalities. Particularly transport and sleep have been dealt with in the literature. Typically the proposed models for transport<sup>37</sup> and sleep<sup>38</sup> consider the respective time as an input and follow Becker’s production approach which equates the value of time with the wage rate (i.e., forgone earnings).

#### 1.5 The Value of Time in Activity Models

Another approach to conceptualizing time featured prominently in the literature, is to treat activities as sources of value. Technically, activity times are the elements of the utility function in such models. In a short paper entitled “Time as the Ultimate Source of Utility,” published in the *Quarterly Journal of Economics*, Richard Zeckhauser sketched a model in which value is exclusively derived from the perception of activities.<sup>39</sup> Contrary to Becker’s approach, time is not money or an input in the production process. Time is rather conceptualized as a context, and value cannot be created outside this context. Technically, time and income cannot be merged.<sup>40</sup> Nicholas Georgescu-Roegen shows that the idea that utility is derived from participation in activities rather than purchasing dates back to Hermann Heinrich Gossen and the origins of the utilitarian approach.<sup>41</sup> Gordon C. Winston distinguishes between process and goal utility.<sup>42</sup> He traces this distinction back to Aristotle’s *Nicomachean Ethics* and briefly summarizes it: “Some things are pleasant (or unpleasant) to do while other

---

34) We already illustrated that this is not the case with respect to housework. The challenge to specifying intrinsic properties of paid work is dealt with in the next section.

35) Jara-Díaz and Rosales-Salas, “Beyond Transport Time,” 215.

36) Jara-Díaz and Rosales-Salas, “Beyond Transport Time,” 218.

37) E.g., Sergio Jara-Díaz, “On the Goods-Activities Technical Relations in the Time Allocation Theory,” *Transportation* 30, no. 3 (August 2003): 245-60.

38) E.g., Jeff E. Biddle and Daniel S. Hamermesh, “Sleep and the Allocation of Time,” *Journal of Political Economy* 98, no.5 (October 1990): 922-43.

39) Richard J. Zeckhauser, “Time as the Ultimate Source of Utility,” *Quarterly Journal of Economics* 87 (1973): 668-75.

40) DeSerpa pursues a combined approach in which time can be an input and a context. He uses a utility function that contains commodities and activity times.

41) Nicholas Georgescu-Roegen, “Time and Value in Economics and in Gossen’s System,” *Rivista Internazionale di Scienze Economiche e Commerciali* 32 (1985): 1121-40.

42) Gordon C. Winston, *The Timing of Economic Activities: Firms, Households, and Markets in Time-Specific Analysis* (Cambridge: Cambridge University Press, 1982), 193ff.



things are pleasant (or unpleasant) to have done.<sup>43</sup> Starting from these premises, the relation between time and money in the process of value creation becomes an essential part of the analysis. Identifying incommensurability between time and money is an important result of such models which calls for a fundamental reformulation of the theory of consumption in economics.<sup>44</sup> These theoretical results are complemented by empirical research about time and income poverty as separate dimensions.<sup>45</sup> The theoretical literature also deals with quality and use-intensity of products, defined and analyzed in relation to activities. Satiation with products appears as an important phenomenon, which is completely ignored in mainstream economics.<sup>46</sup> Activity models depart from an important aspect of utilitarian methodology by dismissing the assumption of perfect substitutions between time and money and a homogeneous value of time across work and leisure activities. Each activity is characterized by a particular value.

Concerning the concept of activities and their value in creating intrinsic properties, the models differ substantially. Zeckhauser does not address the issue. Ian Steedman restricts his analysis to a specific subcategory of leisure activities which he terms “pure consumption time.”<sup>47</sup> The model of Wolfgang Fellner and Roman Seidl deals with non-paid work activities. Their and Steedman’s model define activities technically, in terms of input goods. The value-creating, intrinsic properties, distinguishing activities from one another, remain an open issue. The addressed activity models conform to an important aspect of utilitarian methodology, that pleasure is seen as the only intrinsic property of activities and the only intrinsic value, and it is assumed to be subjective. The problem identified in relation to the concept of leisure reappears. Nothing can be said about the concept of activities and their relation to intrinsic value without departing from a utilitarian methodology.<sup>48</sup>

This section has shown that despite the excessive effort researchers have put into understanding the value of time, the intrinsic properties of categories of time-use or activities remain opaque. Put differently, given a utilitarian theory of value it remains unclear how various activities create pleasure. This issue has been identified as the main reason for the difficulties arising in classifying time-use categories and activities. The utilitarian methodology seems unable to provide the theoretical underpinnings for understanding the processes wherein time is involved in creating value.

---

43) Gordon C. Winston, “Activity Choice: A New Approach to Economic Behavior,” *Journal of Economic Behavior & Organization* 8, no.4 (1987): 579.

44) Ian Steedman, *Consumption Takes Time: Implications for Economic Theory* (London and New York: Routledge, 2001).

45) Tania Burchardt, “Time, Income and Substantive Freedom: A Capability Approach,” *Time & Society* 19, no.3 (2010): 318–44, and Joachim Merz and Tim Rathjen, “Multidimensional Time and Income Poverty: Well-Being Gap and Minimum 2DGAP Poverty Intensity-German Evidence,” *The Journal of Economic Inequality* 12, no.4 (2014): 555–80.

46) Wolfgang J. Fellner and Roman J. Seidl, “Satiated Consumers: Allocation of Consumption Time in an Affluent Society,” *Metroeconomica* 66, no. 3 (July 2015): 534–63.

47) Steedman, *Consumption Takes Time*, 5.

48) The literature about time use also contains suggestions for a non-individualistic approach to value. M. Fischer-Kowalski, et al., suggest four subsystems of the social system that should get proper recognition: the personal system, the household system, the economy system and the community system. The advantage of this systemic rather than individualistic perspective on time-use should be to draw attention to the specific possibilities and constraints a community has in its interactions both with its natural environment and for its members among one another. Marina Fischer-Kowalski, et al., “Sociometabolic Regimes in Indigenous Communities and the Crucial Role of Working Time: A Comparison of Case Studies” (March 2010): 7; <http://ubdocs.uni-klu.ac.at/open/voll/socec/AC08144429.pdf>. From a social reformist perspective, Frigga Haug suggests distinguishing four areas of human activity that should get equal representation in peoples’ life: paid work, care, culture, and politics. Frigga Haug, “Four-in-One Perspective: A Manifesto for a More Just Life,” *Socialism and Democracy* 23, no. 1 (2009): 119–23.

## 2. A Reconceptualization of the Value of Time<sup>49</sup>

The previously discussed literature on the subjective value of time reduces intrinsic properties of time-use to disutility (work, either paid or unpaid) and utility (non-work). Nothing else can and has to be known about activities. This approach poses issues for the conceptualization of activities and categories of time-use and their value. Consequently, utilitarian methodology appears unable to analyze in which ways commodification of time effects the value of time. In order to answer this initially defined research question we depart from the idea that utility or pleasure is the only intrinsic property of activities. We propose an alternative view on intrinsic properties of activities in order to scrutinize how they create value.

The purpose of income does not have to be seen exclusively in generating pleasurable consumption. The term “purchasing power” reveals an interesting aspect. Instead of disutility, power can be conceptualized as an intrinsic property of paid work.<sup>50</sup> Value does not have to be exclusively oriented towards the inside (i.e., feelings or emotions): it can be oriented towards the outside. Power and the intention to control are oriented towards the outside, even though, the potentially underlying fear of the future is a feeling, it is a very limiting assumption that pleasure should be the only kind of feeling that matters, that there is no deeper understanding of other kinds of feelings, and that their interaction is conceptualized within the utility theory of value. In the next section, we deal with concepts that help with closing this gap. Power as an intrinsic property of paid work, and other activities render consumption much less important in the process of value creation. Savings may provide a sensation of power and control over future events.

To discuss further intrinsic properties of activities we particularly draw on the literature about quality of work. In the neoclassical labor market model, labor is assumed to be a homogeneous good and paid work a homogeneous, unpleasant experience. Questions about quality of work do not arise. The assumption that people in their role as workers are only interested in the amount of money they earn is incompatible with workers having an interest in their work (e.g., what tasks they perform, for whom they work). In this case quality of work becomes an issue. Good jobs provide workers with such things as interesting tasks, social recognition, and respect.

An important aspect of quality is playfulness. By playfulness we mean a state of authenticity that is free from fear and enables one to live fully in the present. Although playfulness can be pleasurable its purpose is authenticity and not hedonic pleasure. Hedonic pleasure can be a way to distract and to avoid authenticity if authenticity implies confronting painful experiences. Authenticity potentially contains and involves all kinds of feelings and emotions. Playfulness is particularly characterized by feelings of curiosity and expansion. Achievements resulting from an activity become a by-product of the activity or the process itself. Physical, emotional, and mental growth are by-products of intrinsic impulses to engage in play. Writing an academic article requires effort and discipline. At the same time it can entail episodes dominated by playfulness, which are not just free from irksomeness but empowering and nourishing.

The dichotomy of painful production and pleasurable consumption in mainstream economics rests on the idea that ends (i.e., consumption) and means (i.e., production) can be separated from each other. Contrary to that, critical institutional economics describes life as an on-going, active process with nothing that can

---

49) This section rests to a large extent on a previous publication: Wolfgang J. Fellner, “Work and Leisure: Money, Identity, and Playfulness,” in *Routledge Handbook of Ecological Economics: Nature and Society*, ed. Clive L. Spash (Routledge, 2017), 214–23.

50) For Bertrand Russell the main purpose of economics is to contribute to our understanding of power: “Economics as a separate science is unrealistic, and misleading if taken as a guide in practice. It is one element – a very important element, it is true – in a wider study, the science of power.” Bertrand Russell, *History of Western Philosophy* (Routledge, 2013/1946), 108.

be substantively distinguished as a consummatory end from a productive means. “Means and ends are such only in a temporal sequence. Life is an active continuum”.<sup>51</sup> Playfulness and the other intrinsic properties dealt with in this section, render paid work as an end in itself. This approach emphasizes doing rather than having, in line with Aristotelian *eudaimonia*.<sup>52</sup> While states of exhaustion and the need for recreation clearly exist, the point here is to stress the intrinsic human capacity and motivation to be active as part of a person’s life force. Similarly, Andina Schwartz has argued that adults need to work, in the same way that children need to play, in order to fulfil themselves as persons.<sup>53</sup> Being active and centred has to be distinguished from restlessness. It is important to recognize that restlessness is in sharp contrast with playfulness.<sup>54</sup> In the literature about commodification of timerestlessness has been described by Ulrich Beck as the result of “the value imperialism of work”.<sup>55</sup>

The kind of paid work someone does and how time is spent in general, is an important part of personal identity. The question, “who am I?” is indivisible from all the activities in which a person engages. Imagining everybody as being indifferent about their professions is unrealistic. A good job can provide humans with a variety of feelings, such as pride in what they do, and social status, such as respect from other people. However, even bad jobs that are devoid of prestige, physically exhausting, demeaning, trivial in nature, or mindlessly repetitive provide a badge of identity.<sup>56</sup> To grasp this aspect, paid work has to be conceptualized as a basic requirement of adult life, necessary in order to fulfil ourselves as persons and important for mental health. In a positive sense, paid work has the ability to provide us with a sense of meaning. To do so, interests like moral, political, and social attitudes have to be met in order to avoid, at least to some extent, deprivation and alienation. A sense of meaning is incommensurable with compensation by money. Even if people are willing to compromise their attitudes for additional income, there are natural limits to this substitution. Otherwise society becomes nothing more than a grouping of ruthlessly greedy and corrupt individuals.

Work is also very important for “who the I becomes”. Al Gini argues that “the business of work is not simply to produce goods, but also to help produce people”.<sup>57</sup> At the individual level, this argument renders the decision about what to do for a living, of paramount importance for personal development. A good job allows a person to exercise realised capacities and to extend faculties. John Rawls calls this aspect “the Aristotelian principle”.<sup>58</sup> It acknowledges curiosity as an innate driver of human activity and renders skilled, varied, and complex activities superior to simple, repetitive ones because they provide the means to realise curiosity and competence.<sup>59</sup> At the social level, the quality of available jobs becomes a key indicator for future mental and physical faculties in society. In a similar vein the Aristotelian conception of work emphasizes the importance of quality of work for well-being and *eudaimonia*, because work shapes the worker’s self-development and character.<sup>60</sup>

---

51) David Hamilton, “Institutional Economics and Consumption,” *Journal of Economic Issues* XXI, no.4 (December 1987): 1540.

52) Andrew Sayer, “Contributive Justice and Meaningful Work,” *Res Publica* 15, no. 1 (February 2009): 4.

53) Al Gini, “Work, Identity and Self: How We Are Formed by the Work We Do,” *Journal of Business Ethics* 17, no. 7 (1998): 709.

54) This contrast is not captured by S. B. Linder, who explains the cultural phenomenon of restlessness and acceleration in a utilitarian framework as the result of a sharp increase in the shadow price of leisure.

55) Ulrich Beck, *The Brave New World of Work* (John Wiley & Sons, 2000), 7.

56) Gini, “Work, Identity and Self,” 709.

57) *Ibid.*, 707.

58) Sayer, “Contributive Justice,” 5.

59) Gini, “Work, Identity and Self,” 709.

60) Sayer, “Contributive Justice,” 4–5.

Besides a sense of meaning various authors have emphasised a sense of belonging as an important aspect of identity and good work. Ideally, at work people have a sense of belonging at all levels: to others with whom they work, to the organization for which they work, and to society as a whole. While a sense of belonging and community might vary in strength at different levels, spending a substantial part of a lifetime in an environment where there is no sense of belonging at any level would appear inhumane. According to Ernst Friedrich Schumacher, work provides us with an opportunity to overcome our natural egocentricity by enabling us to act in conjunction with others.<sup>61</sup> Sympathy for the goals of an organization allows employees to perceive their own work as part of a bigger project that goes beyond individual capacities. Paid work provides a chance to experience oneself and to be recognized as a valuable member of society.

A sense of meaning and a sense of belonging are essential aspects of identity. A sense of meaning represents an important part of the relation someone has with oneself. A sense of belonging represents the relation with others. While playfulness has been described as the capacity to live fully in the present, a sense of meaning and a sense of belonging provide stability by connecting the past with the future.

Power, playfulness, a sense of meaning and a sense of belonging render humans as social and political beings. We can conceptualize and define activities in terms of the composition of these four intrinsic properties. They have to be seen as independent aspects that are valuable in their own right, not because they are associated with hedonic pleasure in one way or the other. This feature of the proposed intrinsic properties of activities confirms that they can be interpreted as intrinsic values. This concept of value departs from value monism, represented in both CPE, in the form of the labor theory of economic value, and NE, in the form of utility theory. The extent to which activities contain intrinsic properties explains the process in which value is created. The value of activities results from the strength of each of the intrinsic values involved.

### 3. Commodification of Time

One of the main claims of mainstream economics is that utilitarian methodology is able to analyze and explain human behavior. Pleasure seeking or utility maximization, as the exclusive motivational force, is an integral part of this methodology.<sup>62</sup> The idea that value and motivation are inextricably linked is particularly obvious in behavioral economics where choice is interpreted as an expression of value. If the hypothesis that behavior mirrors value holds, contemporary psychological literature about motivation might help to validate any concept of value. It would have to be shown that the suggested intrinsic properties of activities relate to motivational forces that prove relevant for explaining behavior in psychology. This would support our claim that the intrinsic properties of activities can be interpreted as intrinsic values.

Nancy H. Leonard, et al., propose a metatheory of work motivation incorporating traditional theories of motivation and self-concept theory.<sup>63</sup> They offer “five sources of motivation”:

- extrinsic/instrumental motivation,
- internal self-concept,
- external self-concept,
- goal internalization, and
- intrinsic process motivation.

---

61) Gini, “Work, Identity and Self,” 709.

62) Garry S. Becker, *The Economic Approach to Human Behavior* (Chicago: University of Chicago Press, 1976).

63) Nancy H. Leonard, Laura L. Beauvais and Richard W. Scholl, “Work Motivation: The Incorporation of Self-Concept-Based Processes,” *Human Relations* 52, no. 8 (August 1999): 969–98.

John Barbuto and Richard Scholl refer to this integrative taxonomy and show that it comprises the motives with which the major theorists and models about motivation have dealt since the 1950s.<sup>64</sup> They also empirically validate the five sources of motivation. Combining the five sources of motivation with David McClelland's "big three" motives allows us to illustrate the potential benefits and threats associated with each of the five sources of motivation.<sup>65</sup> The big three are: achievement, power, and intimacy.<sup>66</sup> In the subsequent paragraphs we briefly describe the five sources of motivation and affiliate them with the big three and the four intrinsic values proposed in this paper.

**Extrinsic/Instrumental motivation** is described as behavior directed towards tangible outcomes, such as pay, promotions, or bonuses. In terms of the big three, instrumental motivation is closely related to the urge for power. This source of motivation also matches with power as an intrinsic value. The urge for power implies the desire to have an impact on people, controlling situations and others, and achieving status and recognition. Failure to fulfil the urge for power is associated with feelings of helplessness, loss of control, dependence, and disregard.

**Internal self-concept-based motivation** is driven by internal standards of traits, competencies, and attitudes that become the basis for the ideal self. Behaviors are directed towards a reinforcement of these standards. This source of motivation matches with a sense of meaning as intrinsic value. Big-three: Internal self-concept-based motivation is predominantly related to the urge for achievement. This urge entails the desire for success, progress, and innovation. Failure to meet the urge for achievement results in feelings of inability, denial, or weakness.

**External self-concept-based motivation** is described by Barbuto and Scholl in the following way: "In this source, motivation tends to be externally based when the individual is primarily other-directed, seeking affirmation of traits, competencies, and values. The ideal self is adopted from role expectations of reference groups. The individual behaves in ways that satisfy reference group members, first to gain acceptance, and after achieving that, to gain status."<sup>67</sup> The existence of this source of motivation illustrates social human nature and emphasizes a sense of belonging as an intrinsic value. Otherwise people would not show such an adaptive type of behavior. Big-three: External self-concept-based motivation is predominantly related to the urge for intimacy. It implies the desire for attention, security, and friendship/companionship. Failure to meet the urge for intimacy results in fear of rejection, feelings of isolation, or feelings of futility.

**Goal internalization motivation:** Individuals adopt attitudes and behavior because the contents are congruent with their personal value systems. This happens for example in a situation where "Each worker believes in the cause and as such, is motivated to work towards the goal of the collective."<sup>68</sup> This source of motivation can be thought of as behavior in line with and resulting from the intrinsic value of identity. Identity has been subdivided into a sense of meaning and a sense of belonging. Interestingly, with respect to the big-three, this source of motivation is related to both the urge for achievement and the urge for intimacy. This seems to confirm that the concept of identity is comprised of a sense of meaning and a sense of belonging.

---

64) John E. Barbuto and Richard W. Scholl, "Motivation Sources Inventory: Development and Validation of New Scales to Measure an Integrative Taxonomy of Motivation," *Psychological Reports* 82, no. 3 (June 1998): 1011–22.

65) David C. McClelland, *Human Motivation* (Cambridge University Press, 1987).

66) In a series of publications McClelland was able to show that stimulation of each of these motives is associated with the release of specific neurotransmitters. This can be interpreted as empirical evidence for their existence.

67) Barbuto and Scholl, "Motivation Sources," 1012–13.

68) *Ibid.*, 1013.

Intrinsic process motivation is described as certain kinds of work or behavior in which people engage for the sheer fun of it. Work itself acts as the incentive, as workers enjoy what they are doing. The previous section described this source of motivation as playfulness. Its key characteristic is that it is not oriented towards a certain result. None of the big-three seems to be involved. If nothing has to be achieved or is at stake, there is no risk of failing and no threat is involved. This corresponds to the idea that playfulness is free from fear, which fundamentally distinguishes intrinsic process motivation from all other sources of motivation.

From this juxtaposition of the five sources of motivation, the big three, and the four intrinsic values, it can be concluded that the four intrinsic values have been confirmed as irreducible. They are clearly associated with the five basic sources of motivation in psychological literature and have to be considered relevant incentives for behavior.

After clarifying the concept of value in relation to activities, a definition of commodification of time in terms of intrinsic values can be provided: by commodification of time we mean a shift in the relevance of intrinsic values. While the intrinsic value of power becomes more important, other intrinsic values become less important.

From what has been said before about the various intrinsic values several effects of the commodification of time can be identified. In terms of motivation, controlling situations and people, as well as status and recognition, becomes more important. In terms of emotions, feelings of helplessness, loss of control, dependency, and disregard become more threatening. Commodification of time leads to a stronger outward orientation. Such an increase in outward orientation of behavior (e.g., “chasing money” or pursuing “The American Dream”) might be one of the major cultural effects of commodification. Less importance of and interest in playfulness may increase the sensation of restlessness and hurriedness.<sup>69</sup> Less importance of a sense of meaning might cause increased insecurity and disorientation, which might trigger a vicious cycle with enforced power-seeking in order to combat the perceived insecurity. Less importance of a sense of belonging may cause a deterioration of the quality of relationships.<sup>70</sup>

It is important to be aware that an increase in the importance of power as an intrinsic value is not problematic as such. Under certain circumstances it may be necessary in order to survive or to lead the “outside life” someone wants to live. Commodification of time is problematic when the right balance among intrinsic values does not exist or gets lost.

#### 4. Conclusions

In order to contribute to the conceptual understanding of the commodification of time it turned out to be necessary to depart from utilitarian methodology in several ways. We departed from the concept of hedonic pleasure as the only intrinsic value. Based on literature about work and intrinsic properties or qualities of activities we suggested that power, playfulness, a sense of meaning, and a sense of belonging are intrinsic values. We also departed from the concept of pleasure-seeking or utility-maximization as the only motivational force in people’s lives, in favor of the “five sources of motivation”, well established in contemporary psychological research about behavior. The five sources of motivation are represented in the identified four intrinsic values.

Commodification of time has been defined as a shift in the relevance of intrinsic values: the intrinsic value of power becomes more important and the other intrinsic values become less important. Some of the identified potential effects of the commodification of time are the perception of acceleration and restlessness,

---

69) Hartmut Rosa, “Social Acceleration: Ethical and Political Consequences of a Desynchronized High-Speed Society,” *Constellations* 10, no.1 (2003): 3–33.

70) This aspect of commodification is particularly well captured in M. Ende’s novel *Momo*.

a deterioration of the quality of relationships, outside orientation with a stronger focus on status and recognition, and feelings of insecurity and disorientation due to a weaker identity. Looking for ways to fill the created void might encourage outside orientation even more.

Utilitarian methodology in neoclassical and mainstream economics puts a strong emphasis on power and neglects the other intrinsic values. It is very likely that this mind-set and the resulting policy proposals have an impact in favor of commodification of time. This can lead to problematic cultural effects like those mentioned in the previous paragraph. Institutional and motivational structures should be designed in a way to allow people to find the right balance among intrinsic values. This requires recognition of the intrinsic values of playfulness, a sense of meaning and a sense of belonging in economic theory.

Bibliography:

- Barbuto John E., and Richard W. Scholl. "Motivation Sources Inventory: Development and Validation of New Scales to Measure an Integrative Taxonomy of Motivation." *Psychological Reports* 8, no.3 (June 1998): 1011–22.
- Beck, Ulrich. *The Brave New World of Work*. John Wiley & Sons, 2000.
- Becker, Garry S. *The Economic Approach to Human Behavior*. Chicago: University of Chicago Press, 1976.
- Becker, Garry S. "A Theory of the Allocation of Time." *The Economic Journal* 75, No. 299 (September 1965): 493–517.
- Biddle, Jeff E., and Daniel S. Hamermesh, "Sleep and the Allocation of Time." *Journal of Political Economy* 98, no. 5 (October 1990): 922–43.
- Biggs, Simon, Michael McGann, Dina Bowman, and Helen Kimberley. "Work, Health and the Commodification of Life's Time: Reframing Work–Life Balance and the Promise of a Long Life." *Ageing and Society* 37, no. 7 (2017): 1458–83.
- Burchardt, Tania. "Time, Income and Substantive Freedom: A Capability Approach." *Time & Society* 19, no. 3 (2010): 318–44.
- Corrie, Daniel. "What Is Human Time?." *The Hudson Review* 54, no.1 (2001): 61–71.
- DeSerpa, A. C. "A Theory of the Economics of Time," *Economic Journal* 81, no. 324 (December 1971): 828–46.
- Ende, Micheal. *Momo*. New York: Penguin, 1986/1973.
- Fellner, Wolfgang J. "Work and Leisure: Money, Identity, and Playfulness." In *Routledge Handbook of Ecological Economics: Nature and Society*, edited by Clive L. Spash, 214–223. Abingdon: Routledge, 2017.
- Fellner Wolfgang J., and Benedikt Goehmann. "Human Needs and the Measurement of Welfare," SRE-Discussion 2017/07, [www.sre.wu.ac.at/sre-disc/sre-disc-2017\\_07.pdf](http://www.sre.wu.ac.at/sre-disc/sre-disc-2017_07.pdf).
- Fellner, Wolfgang J., and Clive L. Spash. "The Role of Consumer Sovereignty in Sustaining the Market Economy." In *Handbook of Research on Sustainable Consumption*, edited by Lucia A. Reisch and John Thøgersen, 394–409. Edward Elgar Publishing, Inc., 2017.
- Fellner, Wolfgang J., and Roman J. Seidl, "Satiated Consumers: Allocation of Consumption Time in an Affluent Society." *Metroeconomica* 66, no. 3 (July 2015): 534–63.
- Fischer-Kowalski, Marina, Simron J. Singh, Lisa Ringhofer, Clemens M. Grünbühel, Christian Lauk, Alexander Remesch. "Sociometabolic Regimes in Indigenous Communities and the Crucial Role of Working Time: A Comparison of Case Studies". March 2010. <http://ubdocs.uni-klu.ac.at/open/voll/socec/AC08144429.pdf>.
- Folbre, Nancy. "A Theory of the Misallocation of Time." In *Family Time: The Social Organization of Care*, edited by Nancy Folbre and Michael Bittman, 7–24. London: Routledge, 2004.
- Georgescu-Roegen, Nicholas. "Time and Value in Economics and in Gossen's System." *Rivista Internazionale di Scienze Economiche e Commerciali* 32 (1985): 1121–40.



- Gini, Al. "Work, Identity and Self: How We Are Formed by the Work We Do." *Journal of Business Ethics* 17, no. 7 (1998): 707–714.
- Goodhew, Linda, and David Loy, "Momo, Dogen, and the Commodification of time," *KronoScope* 2, no. 1 (2002): 97–107.
- Gronau, Reuben. "Leisure, Home Production, and Work-The Theory of the Allocation of Time Revisited." *Journal of Political Economy* 85, no. 6 (December 1977): 1099–1123.
- Hamilton, David. "Institutional Economics and Consumption." *Journal of Economic Issues* XXI, no. 4 (December 1987): 1531–54.
- Haug, Frigga. "Four-in-One Perspective: A Manifesto for a More Just Life." *Socialism and Democracy* 23, no. 1 (2009): 119–23.
- Jara-Díaz, Sergio and Jorge Rosales-Salas, "Beyond Transport Time: A Review of Time Use Modelling," *Transportation Research Part A: Policy and Practice* 97, (2017): 209–230.
- Jara-Díaz, Sergio. "On the Goods-Activities Technical Relations in the Time Allocation Theory." *Transportation* 30, no. 3 (August 2003): 245–60.
- Leonard, Nancy H., Laura L. Beauvais, and Richard W. Scholl. "Work Motivation: The Incorporation of Self-Concept-Based Processes," *Human Relations* 52, No. 8 (August 1999): 969–98.
- McClelland, David C. *Human Motivation*. Cambridge: Cambridge University Press, 1987.
- Merz, Joachim, and Tim Rathjen. "Multidimensional Time and Income Poverty: Well-Being Gap and Minimum 2DGAP Poverty Intensity-German Evidence." *The Journal of Economic Inequality* 12, no. 4 (2014): 555–80.
- Moscatti, Ivan. "History of Consumer Demand Theory 1871-1971: A Neo-Kantian Rational Reconstruction." *European Journal of the History of Economic Thought* 14, no. 1 (2007): 119–56.
- Noonan, Jeff. "Free Time as a Necessary Condition of Free Life." *Contemporary Political Theory* 8, no. 4 (2009): 377–93.
- Polanyi, Karl. *The Great Transformation: The Political and Economic Origins of Our Time*, Boston: Beacon Press, 1957/1944.
- Reid, Margret G. *Economics of Household Production*. J. Wiley & Sons, Inc., 1934.
- Rosa, Hartmut. "Social Acceleration: Ethical and Political Consequences of a Desynchronized High-Speed Society." *Constellations* 10, no. 1 (2003): 3–33.
- Russell, Bertrand. *History of Western Philosophy*. Routledge, 2013/1946.
- Sayer, Andrew. "Contributive Justice and Meaningful Work," *Res Publica* 15, no. 1 (February 2009): 1–16.
- Steedman, Ian. *Consumption Takes Time: Implications for Economic Theory*. London and New York: Routledge, 2001.
- Stickers, Kenneth W. *Economies of Gift: Their Philosophical Principles*. Association for Heterodox Economics, Manchester, U.K., 10 July 2017.
- Thompson, Edward Palmer. "Time, Work-Discipline, and Industrial Capitalism." *Past & Present* 38, (December 1967): 56–97.

Tuckman, Alan. "Employment Struggles and the Commodification of Time: Marx and the Analysis of Working Time Flexibility." *Philosophy of Management* 5, no. 2 (2005): 47–56.

Winston, Gordon C. *The Timing of Economic Activities: Firms, Households, and Markets in Time-Specific Analysis*. Cambridge: Cambridge University Press, 1982.

Winston, Gordon C. "Activity Choice: A New Approach to Economic Behavior." *Journal of Economic Behavior & Organization* 8, no. 4 (1987): 567–85.

Zeckhauser, Richard J. "Time as the Ultimate Source of Utility." *Quarterly Journal of Economics* 87 (November 1973): 668–75.