Hazel Kyrk, the Economics of the Social Relevance of Consumption and Keynes' Consumption Function

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Introduction

With *A Theory of Consumption* 1923, Hazel Kyrk achieved the most comprehensive and articulate formulation of an approach to the analysis of consumption that in the early 20th century was put forward in the United States. Developed mainly by *women* economists, this approach is made of theoretical, empirical, and historical contributions that developed principles originally theorised by T. Veblen. In its original versions, the approach is clearly *independent* and even *in opposition to* the principles of marginalist analyses.

This approach is part of a broader stream of studies on consumption which being primarily empirical, were largely independent of the theoretical principles of marginalist theory.

In the analysis of consumption proposed by Keynes in the General Theory, we find together with theoretical elements that can be traced back to the traditional marginalist analyses, strong original elements. The dependence of the level of consumption expenditure on the level of income, which is essential for the assertion of the principle of effective demand, can be traced back to the whole body of empirical studies. In qualifying this relationship, then, Keynes uses elements traceable to the analyses that constitute the approach to consumption as a social phenomenon of which Kyrk is the most advanced exponent.

The paper aims at arguing these links, and it is structured as follow: the first part is devoted to summarizing the main principles of the approach based on the social relevance of consumption as they were sketched in Kyrk (1923). We then consider, in the second and third sections, the connection of the works arguing the social relevance of consumption with the more general early history of the (empirical) analysis of consumption both in Europe and in particular in the U.S. In a fourth part, we consider both traditional and innovative principles in the analysis of consumption in *The General Theory* and the relations between the latter and the analyses considered in the first two sections. Possible traces of a direct connection of Keynes' analysis with the work of the American institutionalists are tracked in the fifth section.

The approach based on the social relevance of consumption

The economics of the social relevance of consumption[1] was based on some core ideas asserted

[1] For a more detailed and complete description of the evolution of the approach see Trezzini (2016)

in Veblen's *The Theory of the Leisure Class*, which in the following years were developed on the ground of the theory by institutionalist economists mostly *women* economists: Hazel Kyrk, Theresa McMahon and Elisabeth Gilboy.[2]

We may summarize the main principles and features of the approach. The demand for consumption goods derives mainly from their social significance rather than their intrinsic utility. Households then tend to consume in each period the amount and the specific goods which they consider as an appropriate standard of respectability for their class. This is true on practically every rung of the social ladder. Failure to observe these social standards could entail the loss of both *social repute* and *self-respect*. The aggregate level of consumption in any given period has then to be seen as determined by composition of these individual expenditures determined by the different standards adopted by the individual households.

After Veblen's contribution, these assumptions were developed in 1912 by Wesley C. Mitchell, a leading figure of institutionalism, who argued that consumption far from being the result of rational choices, is determined by the reference to socially determined standards. This is due to the fact that "spending money" is a "backward art", much less technologically developed than the art of producing goods.

The social role of consumption implies a continuous tendency of individuals to expand their consumption standards in order to emulate the behavior of superior classes displaying then their real or alleged membership of higher social groups.[3] As income increases, the pressure to imitate the standard of living of higher social groups makes the expenditure of each household to quickly expand. Once the level of income has been at a given level for a sufficiently long period of time, the new corresponding level of consumption become a new standard. This is true both at the individual level and at the aggregate level. The crucial importance that individuals attribute to the display of their social status also means that when their level of income drops, households seek to maintain the level of consumption to which they are accustomed in order not to lose social prestige and self-esteem. Consumption expenditure tends to be, within a certain limit, irreversible.

As soon as the income level rises again, consumption expands from the level acquired and maintained during recessions. Through this cyclical behavior, the standard of living and consumption expenditure tend to increase along with the process of growth and accumulation.

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[2] Rarely recognised as an approach to the determination of level and evolution of consumption alternative to the dominant theory, these contributions are regarded rather as sketchy forms of the principles that were to find rigorous theorisation with the permanent-income and life-cycle hypotheses. See Thomas (1989), esp. fn. 17. An exception is Rutherford (2011), esp. chapter 1.

[3] When the expansion in income is more or less generalized, the expansion of individual consumption could not correspond to any change in the relative position of the individual.

These basic ideas, originally put forward by Veblen, were developed by a group of women economists. Hazel Kyrk, the leading figure of this group of scholars, contributed in two directions to the development of the approach. First she made explicit the conception of saving which is implied by these assumptions. Both at individual and aggregate level, saving has to be conceived for as the residual of the income once that the expenditure for the socially determined standard of consumption has been satisfied. This residual nature of saving is a crucial feature of this approach which, more than other issues, makes the original versions of the approach inconsistent with the principles determining consumption expenditure in the marginalist theories.[4] The analyses based on the intertemporal maximization of utility imply that the determination of saving and consumption are two faces of the same process of intertemporal allocation of resources. Savings cannot be conceived as a residual of the process of determination of consumption more than consumption can be conceives as a residual of the process of determination of saving.

As a second contribution, H. Kyrk also stressed the role in the process of consumption expansion played by *technological progress*. Any consumption expansion is only possible when a surplus of income over and above the amount corresponding to the established consumption standard arises. These surpluses make it possible to widen the range of choice for the individuals of the higher classes, who experiment with new goods made available by product innovation.

Technological innovation, however, in the form of process innovation may reduce the relative price of the luxury good making their consumption possible for the classes next in line. The reduction of prices relative to monetary wages may also make possible increases of real income and the expansion of emulative consumption.

This process implies that technological innovation first makes available new goods that start off as luxuries for the richest classes. These new goods become necessities for the riches and luxuries for the classes next in line. Then process innovation makes it possible to extend the consumption of the new goods to lower classes. In this double sense, "*Invention is the mother of necessity.*" (Kyrk, 1923, p. 209).

It is worth recalling a further theoretical issue: two other women economists studied this mechanism in connection with the process of accumulation and growth. Theresa McMahon, assuming Say's law, considered the expansion of consumption due to the mechanisms of emulation, as a factor constantly reducing the potential growth of the economy.

E. Gilboy, who was a Historian, on the other hand, argued the role of the process of consumption expansion due to its social relevance is a driving force in the growth process. In

[4] The assumption of the residual nature of saving also makes this approach different from the more popular position put forward by J. Duesenberry and apparently very similar to Kyrk's approach. In Duesenberry's version the main ideas of the approach are inserted into a long-run theoretical context of intertemporal maximization of utility (see Trezzini (2012)).

particular, she argued that this process was at the basis of the demand expansion that played a crucial role in the British industrial revolution.

The principles of the social relevance of consumption are then theoretically coherent both with Say's law, in the analysis of McMahon, and with a determining role of demand in the growth process, in the analysis of Gilboy. This is another sign of its independence from the marginalist principles which generally exclusively lead to the irrelevance of aggregate demand expansion in the growth process.

It is also worth recalling the work of another woman economist, J.B. Peixotto, who developed two studies, based on family budgets, on incomes and consumption patterns of particular social groups. In an early 1927 paper, she explicitly states that her analyses "verify Veblen's theory of the relation between earning capacity and spending" (Peixotto, 1927, p. 120). Peixotto studies the families of University of California teachers and argues that they tend to spend according to the consumption patterns of the "professional class" to which they culturally and socially belong. Having lower incomes than members of the professional class, families of academics tend to adopt higher consumption standards than they can actually afford. In Peixotto (1929), badget data of families of typographers in San Francisco are studied. These workers were particularly highly paid. Their household tend, according to Peixotto, to uniform their habits of consumption of households belonging to classes socially considered higher, i.e. that of the 'business and professional men'.[5]

Early empirical studies on poverty and workers conditions

The emergence of this theoretical approach to the analysis of consumption in the United States can be placed in the context of the long and rich history of the analysis of household consumption expenditure. The beginning of this history[6] is traced by Stigler (1954)[7], who relies heavily on Higgs (1899), to the studies of poverty in late 18th-century England. In particular, the clergyman David Davies collected data on the budgets of 127 families in his and other parishes, and reported their contents in detail in *The Case of Labourers in Husbandry* (Bath, 1795). Davies advocated the

[5] These works are based on very limitied samples, 96 families for the first and 82 for the second and the statistical tecniques obviously now appear naïve as all that used at that time. They are however a meaningful sign of the diffusion of the approach. On the importance of the works by J. Peixotto see Cookingham (1987) who argues that her contributuons can be conceived as "a relative income theory of consumption".

[6] The lines of development of consumption analysis described in the text develops some contributions more robust but less popular of the reconstruction of this development proposed by Friedman in in the introduction of his 1957 book. Friedman proposed what became known as the *stylized history* of consumption analysis. This stylized history asserted that Keynes' was the origin of the analysis of aggregate consumption and that since the early years following the General Theory was subject to empirical testing. Friedman proposes his analysis as a way of interpreting the empirical puzzle which emerged since 1942 in the empirical tests of Keynes' position.

[7] Stigler's analysis actually aims to study the way in which income level has emerged as a factor explaining the demand for goods within traditional theory based on marginal utility.

establishment of a minimum wage. A second work cited as the origin of consumption analysis is *The State of the Poor* (London, 1797) by Sir F. M. Eden, a monumental study, containing a history of the poor and Poor Laws, but also a great deal of details on the budgets of families in various counties of England.

These papers were followed by numerous others in the first half of the nineteenth century in the United Kingdom that were published in the volumes of the Journal of the Royal Statistical Society.

In the following years, analyses of household budgets were often developed in connection with the solution of political problems. Arthur Young, an agronomist founder of the *Annals of agricultures* (1784-1820) and minister of agriculture from 1793, was commissioned during the Napoleonic wars to estimate the necessary expenditures of a workingman's family to determine possible taxation.[8] Similarly, Higgs argues, William Cobbett (1763 -1835) an English intellectual and politician, strongly committed to the defense of the poor and an opponent of the Corn Laws, produced, in addition to historical studies and political pamphlets, surveys of the conditions of peasant families that he published in *Rural rides* (1830).[9]

In these early works, budget data were considered a special form of historical data, and were summarized in the same way that nonquantitative historical data were traditionally summarized. Stigler (1952) argues that beginning in 1848, two factors stimulated and modified this type of works, which spread to many countries of Europe. The emergence of the labor movement made workers' conditions a political issue; on the other hand, in the field of quantitative analysis, developments took place both in the methods for collection of social data and, above all, and in the mathematical theory of probability (by Laplace, Cournot, Poisson, Gauss) and thus in the elaboration of budget data.

La Play, father of scientific family budgets studies, published in 1855, Les Ouvriers Européèns[10], in which he studied in detail the characteristics and expenditures of four English families chosen with the help of public authorities as representative of the typical English family. According to Higgs several works developed "in the wake of La Play" in particular; W. L. Sargant published *Economy of the Labouring Classes* (1857)[11] while R. D. Baxter in *The Budget and the Income Tax*,

[8] Brunt, L., (2003) "Rehabilitation of Arthur Young" in *The Economic History Review* Vol. 56, N°.2 pp.265-299

[9] Dick, I., (2004) "Cobbet, William (1763-1835)" in Oxford Dictionary of National Biography (online ed.) Oxford University Press

[10] La Play, F. (1855) (second edition 1877.79) *Les Ouvriers européens: Études sur les travaux, la vie domestique et la condition morale des populations ouvrières de l'Europe*, précédée d'un exposé de la méthode d'observations, Paris, Imprimerie impériale, available to https://gallica.bnf.fr/ark:/12148/bpt6k84261b.texteImage

[11] Sargant, W. L. (1857) *Economy of the Labouring Classes*. London, 1857 republished by Wentworth press 2019.

(1860)[12] based his study on taxation on an analysis of family budgets; Finally Leone Levi published *Wages and earnings of the Working Classes* (London 1885).[13]

In 1889, il Board of Trade founded the *Labour Department* which issued a *Blue Book* 'unhappily without sequel" entitled *Returns of Expenditure by Working Men*. In 1893, Charles Booth president of the Royal Statistical Society devoted his *Opening Address* of the annual meeting to an investigation on family budgets of the people of London based on data from the Census del 1891, Booth, C. (1893).[14] The Economic Club in 1896 published a collection of studies in *Family Budgets*[15] probably developed under the influence of a French statistician, colleague of La Play, M. R. Lavollée who, in 1896, had published a study on consumption expenditure of working classes in eleven European countries.[16]

Higgs (1899), after a review of studies on Family Budgets, develops a study of the spending of English workers in which he tends to argue that poverty is the result of waste. In his argument we find a reference to display motives for wasteful consumption; he argues that frequently, in English parks, on holydays, it is possible to meet servant dressed as Ladies and that poor families afford sophisticated funerals for their relatives.

The number of the empirical works on consumption expenditure was on the *whole very large*, Williams and Zimmerman (1935) is a review work, widely cited in historical reconstructions of empirical analysis on consumption. They examined and summarized over 1500 family-budget studies carried out between 1875 and 1935, developed all over the world. The number of works reviewed is surprisingly high, especially in view of the development of statistical techniques of data gathering and processing. Within this large body of work, moreover, those made in the United States seem to be of no small importance. It is important to stress that these studies were originated for studying household spending of specific social group, poor, workers. All the later extensions maintained a link between consumer spending and the class, group, or category to which it belonged. This was

[12] See Feuchtwanger, E. J. (2004), "Baxter, Robert Dudley (1827–1875)" Oxford Dictionary of National Biography (online ed.) Oxford University Press

[13] Leone Levi (1821 -1888) born to a Jewish family in Ancona, Italy, became an English economist and jurist favoring free trade and among other works published the one quoted in the text. See Rubin, G. R. (2004) "Levi, Leone". Oxford Dictionary of National Biography (online ed.) Oxford University Press.

[14] Booth, C., (1893) *Life and Labour of the People in London: First Results of An Inquiry Based on the 1891 Census*. Opening Address of Charles Booth, Esq., President of the Royal Statistical Society. Session 1893-94 in *Journal of the Royal Statistical Society*, Vol. 56, No. 4, pp. 557-593

[15] Family Budgets. Being the Income and Expenses of twenty-eight British Households, 1891-1894. Compiled for the Economic Club, with an Introduction. [London : P. S. King & Son, 12 and 14 King Street, Westminster, S.W., 1896.

[16] Lavollée, R. (1896) **"***LES CLASSES OUVRIÈRES EN EUROPE*. Études sur leur situation matérielle et morale. (3 tomes : Allemagne Pays-Bas États Scandinaves Russie, Suisse Belgique Autriche-Hongrie Italie Espagne-Portugal, Angleterre)

particularly true in U.S. where the differences between, rural or urban people, white or black communities, became an crucial issue.

The Engel’s law

A line of analysis that developed within these studies of household budgets which is crucial in our reasoning is related to the identification of Engel's law. Ernst Engel, was among the first to apply the idea that regularities that indicated laws to consumer behavior could emerge from the study of budget data. In his 1857 work (republished in 1895)[17], Engel aimed to estimate the composition of Saxony household expenditures by arguing that the proportions of the labor force in different productive sectors should be the same as that of expenditures in order to have a stable economy. On the basis of data on 153 Belgian households, classified into three socio-economic groups, Engel estimated rather roughly the consumption expenditures of the corresponding three classes of families in Saxony and, from those, the aggregate consumption of Saxony and its composition. Engel proposed, therefore, a law of consumption: "The poorer a family is, the greater the proportion of its total expenditure that must be devoted to food." (Ibid., pp. 28-29.). He also asserted that the richer a nation the lower the proportion of food expenditure to its total expenditure.

Subsequent empirical analyses focused on generalizations or deepening of Engel's law that aimed to study the evolution of the proportions of spending on other necessities or expenditures as income changes.

The American economist Carrol Wright, commissioner of labor statistics in Massachusetts, in 1875 proposed a contribution that, for the time, was a model of statistically advanced and comprehensive analysis. On given budgets of 397 working families in Massachusetts, he generalized Engel's law by studying not only the relative proportion of expenditure on subsistence but also considering its components and concluding that as income increases, the proportion spent on "secondary expenditures" becomes greater. Wright also analyzed the proportion of child-rearing expenditures in relation to income and the number of children.

From our point of view, it is important to note that Wright, in 1875, also reached conclusions regarding the relationship between income and the *saved share* of it, stating: "That the higher the income, generally speaking, the *greater the saving, actually and proportionately.*"[18] Moreover, he

[17] Engel, Ernst (1857). "Die Productions- und Consumtionsverhältnisse des Königreichs Sachsen". Zeitschrift des statistischen Bureaus des Königlich Sächsischen Ministerium des Inneren. 8–9: 28–29
"Die Produktion- und Konsumtionverhält – Nisse des Königreichs Sachsen," in Des statistischen Bureaus des Königlich Sächsischen Ministerium des Inneren. Reprinted with separate pagination as an appendix to Engel's Die Lebenskosten belgischer Arbeiter-Familien (Dresden, 1895).
[18] Sixth Annual Report of the Bureau of Labor Statistics (Boston, 1875).

interpreted negative savings as evidence of poverty. This extension of Engel's law to savings attracted almost no attention, while other generalizations, argued much less soundly, had far greater resonance.

Wright's work opened up a strand of empirical research on consumer spending in the United States, where, in the second half of the nineteenth century, the cultural ground was very fertile. In that period, in fact, the widespread expansion of investment in knowledge and education and the growing empirical orientation of economic research led both to the founding of universities destined to become world leaders in economic research and to the foundation of important research institutions.[19]

In the United States, social cultural and religious differences were more relevant than in Europe and thus these factors have been more explicitly considered in the empirical analyses. Fr. L. McVey published in the *Journal of Political Economy* (1897) 'An exercise in Expenditure'. He reports an exercise done in a class of 36 young people taking an economics course at the University of Minnesota. They were asked how they would spend $10,000. He reports the divisions of the total amount among various items proposed in the questionnaire. What is perhaps relevant is the meticulousness with which the composition of the group is specified by gender, race, age, size of hometown, social class. All factors that are evidently considered to influence the distribution of the expenditure of the sum.

William Ogburn was a key figure in the empirical research on family spending: according to Stigler 1954 p.101, the analysis in Ogburn (1919b) constitutes an early example of "application to budget data of correlation and curve fitting techniques." On the basis of two hundred household budgets collected in the District of Columbia in 1916, Ogburn calculated the relationship between the proportion of each expenditure category to total expenditure and household income and household size. These two variables were reduced to a single number through the use of an "adult equivalent" scale. Through this analysis, Ogburn comes to formulate and test the hypothesis that individual household savings is an increasing function of the level of disposable income. This Ogburn hypothesis prompts Thomas (1989, p.133) to note, this work is extremely relevant for the history of macroeconomics, in that it has to be considered, together with the work by Wright, as the origin of the statistical analyses on consumption of the 1930s apparently generated by the *General Theory*. The estimate by Ogburn represents an empirical estimate of a "Keynesian" saving function developed 16 years before the General Theory.

[19] The Massachusetts Institute of Technology was founded in1861, Berkeley University in 1868, the Stanford University in 1885 and the University of Chicago was founded in 1890. On the other hand the U.s. Department of Agriculture was founded in 1862, Bureau of Labor Statistics was founded in 1884. A bit later, in 1920, the National Bureau of Economic Research was founded while the Bureau of Home Economics was founded as a special division of the Department of agriculture in 1923.

It is however crucial not to overlook a precedent: the Italian economist Gustavo del Vecchio as early as 1912 had studied a function very similar to what is called the Keynesian consumption function.[20] Del Vecchio aimed to criticize a work by another Italian economist, Gini (1911), who estimated the demand for subsistence goods as an inverse function of their prices. De Vecchio proposed, by taking up the tradition of studies that extend Engels' law, a function in which the relationship between food expenditure and income is singularly similar to a Keynesian consumption function:

$$c = a + b \log_{10} Y$$

where **c** is food expenditure and **Y** is income (or total expenditure). The shape of this function implies marginal propensity to consume decreases as income increases.[21] Del Vecchio fits this function to budget data; and calculates a "consumption elasticity index" to income.

As already argued, in this large body of empirical works, those developed in the United States, are particularly significant in that they place particular emphasis on the social characteristics determining the composition of consumer spending.

Ogburn (1919b), that we have considered, is very significant also because although empirical in nature it anticipates the principles theorized by Kyrk and other institutionalist women economists. Indeed, Ogburn assumes that consumption is socially determined by assuming that the average composition of consumption baskets changes as the relative position of the consumption unit on the social scale changes. While some components of these baskets, such as housing and clothing expenditures, increase proportionally with income, others, less visible in nature, change less than proportionally.

Later, Ogburn in a 1923 study on the effect of current living standards on wage determination writes: “There is much evidence to show that workers’ families will go without the necessary food, clothing, and warmth in order to get recreation or purchase services or goods that have to do with social standing” (Ogburn 1923, p. 121).

We have already mentioned the work of Jessica B. Peixotto who studied the consumption expenditure of households of particular social groups - academics and typographers - assuming in their behavior both the emulation of consumption of higher classes and the irreversibility of consumption.

[20] "Relazioni fra entrata e consumo," Giornale degli economisti, 3d ser., XLIV (1912), 111-42, 228-54, 389-439. These steps are described in more detail below (p. 107).

[21] This form of the fucntion in the work by Del vecchio is suggested by the so-called Weber-Fechner law. A law of ‘experimental psychology’ put forward by F.H. Weber in 1934 and formalized by G. T. Fechner in 1860. Fechner. G. T. *Elemente der Psychophysik,* 2 vol. (1860). Weber, F. H.; *De Tactu* (1834)

Before the *General Theory*, then, household consumption analysis was a widespread field of analysis both in Europe and in the United States. In this early stage of the empirical analysis of consumption both the level and composition of consumption expenditure were related to the level of income. Initially because the study of poverty was the focus of the analyses; later, because Engel's law emerged and attempts were made to generalize or modify it. Also, in the American studies, the relationship between consumption and income was assumed to be different for different by areas (rural and metropolitan) or community characteristics (whites and blacks). In this environment, institutionalist women economists developed the approach to the analysis of consumption of which Kyrk was the leading figure and that was based on the social relevance of consumption.

Keynes' analysis of consumption

On the basis of these conclusions we may now consider Keynes' analysis of consumption. In Book III, Chapters 8, 9 and 10, of the *General Theory*, Keynes presents a theoretically heterogeneous treatment of the determinants of consumption expenditure.

As known, Keynes assumes that the level of consumption expenditure depends on the level of income, according to a function which he defines 'propensity to consume'. Therefore, Keynes considers that other objective[22] and subjective factors affect this function.

The discussion of the objective factors affecting consumption, different from the level of output, although meaningful of the attempt of considering structural and institutional factors, appears relatively superabundant with respect to the purposes of this paper. Between these factors, however, it is worth stressing the reference to the possible effect of changes in income distribution (determined by changes in monetary wages which do not correspond to proportional changes in prices) on the function.[23]

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[22] It is important to stress that Keynes considers *other* objective factors, this implies that the level of income is one, the most relevant, objective factor.

[23] The reference to changes in income distribution occurs when Keynes considers the first objective factor, i.e., *changes in the wage unit*. They will have no effect on consumption if it corresponds to a proportional change in prices while it might if it is associated with more or less than proportional changes in prices generating a change in the real distribution of income. Keynes devotes considerable attention in both Chapter 8 and 9 to changes in the difference between net and gross income. Consumption depends on net income. It follows that there can be variations in gross income that do not affect consumption-because they do not affect net-and variations in net income that affect consumption but do not affect gross income. The dependence of consumption on net income also implies that gross investment generates the multiplicative process but the relationship between gross and net investment affects the value of the multiplier. It is surprising, if considered in respect to the following developments, that Keynes considers also *changes in tax policy* as an objective factor affecting propensity to consume but limiting this influence to the fact that they may alter the return on accumulated savings: taxes on capital income and capital gains, inheritance taxes have an effect on savings and consumption similar - even in the indeterminacy of the sign - to that of the interest rate. A *change in expectations* about the relationship between present and future income may play an important role for the individual but it is plausible that in the aggregate the effects of those with opposite expectations would be offset. Moreover, there is too much uncertainty about this relationship for it to actually be assumed to have a determinate effect on consumption. However, he concludes

With respect to subjective factors Keynes states that they are essentially those considered by traditional theory: “the analysis of these factors raises no point of novelty” p.107. He also specifies that they vary very slowly and therefore are relevant to a historical investigation or comparison between one social system and another, but they can be considered as given in his short-period analysis of the determination of the level of activity. *“though not unalterable, are unlikely to undergo a material change over a short period of time except in abnormal and revolutionary circumstances.”* P.91

The link between these subjective factors and traditional theory leads Keynes to discuss, in several points, the possible dependence of consumption on the level of the interest rate, which in traditional theories, being the main determinant of the allocation between consumption and savings, leads to the view of the investment-savings equilibrium that is the center of the contrast of Keynesian contribution to traditional theory. Keynes does not deny the relevance of the level of the interest rate, but limits it considerably.[24] On the one hand, following an internal debate within traditional theory, he considers the possibility that changes in the interest rate generate an income effect and a substitution effect that may balance each other in a way that is uncertain and difficult to predict. His main critical argument is, however, that the interest rate may be the main determinant of the level of consumption expenditure when the latter depends only on the allocation of *a given income* between consumption and saving. Assuming that the level of income may be variable this necessarily becomes the most important determinant. He seems to interpret, thus, the traditional analysis of consumption and saving as focusing on elements that become relevant only under conditions in which, income being at the level of full employment, its allocation between present consumption and future consumption must be determined.

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by considering since these uncertain effects are limited in magnitude and in any case can affect consumption in the long run, consumption can be assumed in the short run to be a relatively stable function of (real, excluding) income.
The only objective factor that has since given rise to further theoretical developments is the *variation in "capital values."* The consumption of the wealthy can be sensitive to the monetary value of wealth possessed, which can vary considerably, even in the short term, and be a cause of variation in the ratio of income to consumption. Keynes argues that changes in financial wealth appears as the only way in which changes in the level of the interest rate may indirectly affect consumption. This point will find development in a neoclassical key in the assumption that consumption depends on wealth (permanent income) rather than current income.

[24] Keynes argues that consumption may depend on the discount rate at which the values of future incomes, returns wealth are discounted. This discount rate is different from the interest rate because it includes expectations of loss of purchasing power of the currency and risks about the future value of the transferred income--changes in tax policies or even confiscations. However, it is closely related to and approximated by the interest rate.

Keynes, therefore, argues that consumption mainly depends, at least in the short run, on current income according to a stable function, limiting the relevance of both the other objective factors and the subjective factors affecting the consumption function.

The link to empirical analysis of consumption

In the passages in which Keynes presents and argues the dependence of consumption on income we find the some elements that deserve our attention. When he argues about 'the fundamental psychological law' he points out that "we are entitled to depend [upon this law] with great confidence both *a priori* from our knowledge of human nature and from *the detailed facts of experience"*.

This locution - detailed facts of experience – suggests a link between Keynes's analysis and the vast empirical literature about the dependence of consumer spending on income levels that we considered in the previous sections. As we have observed, the empirical analyses developed in previous decades had led, through a long and tortuous path, to considering the level of income as the main determinant of household consumption expenditure.

As argued by Hynes (1998), Keynes certainly knew that literature. In 1908, indeed, on the Economic Journal, he had commented on a review of a Family Budget data Report (by the Board of Trade) proposed in June 1908 in the same Journal[25]. That review reproduced a table of index numbers aiming at representing real wages in various geographical districts. Keynes criticized the way those indexes were constructed, arguing that depending on the basket of rents, prices and monetary wage assumed as numeraire, the ranking of real wages would have been different. This commentary, though brief, certainly denotes a rather extensive knowledge of the literature on family budgets and the statistical techniques adopted in it. It is extremely plausible, then, that in later years Keynes continued to follow developments in that literature.

Considering, then, the passages in which Keynes elaborates the fundamental psychological law, we find passages in which Keynes argues principles clearly very similar to those of the approach of the social relevance of consumption. As we shall argue, however, he explicitly limits its relevance to the short run.

In arguing that the marginal propensity to consume is less than unity, he writes:

> 'This is especially the case of the so-called cyclical fluctuations of employment during which *habits*, as distinct from more permanent psychological propensities, are not given time enough to adapt themselves to changed objective circumstances. For a man's *habitual standard of life* usually has the first claim on his income, and he is apt to *save the*

[25] The comment by Keynes was in *The Economic Journal,* Vol. 18 issue 71 pp. 472-3 while the original review was published in Volume 18, Issue 70, 1 June 1908, Pages 324–332, the title of the report discussed was *Enquiry by the Board of Trade into Working Class Rents, Housing and Retail Prices, together with the Standard Rates of Wages prevailing in Certain Occupations in the Principal Industrial Towns of the United Kingdom.*

difference which discovers itself between his actual income and the *expense of his habitual standard*; or, if he does adjust his expenditure to changes in his income, he will over short periods do so imperfectly. Thus, a rising income will often be accompanied by increased saving, and a falling income by decreased saving, on a greater scale at first than subsequently.' (Keynes, 1936, p. 97. Emphases added)

He then argues that, even considering any long-run adjustments, the saved share of income in the long run will tend to increase with the level of income.

"For the satisfaction of the immediate *primary needs* of a man and his family is usually a stronger motive than the motives towards accumulation, which only acquire effective sway when *a margin of comfort* has been attained." P.97

In both these passages we note the conception of saving as a residual, which, as we have considered, is limpidly theorized by Hazel Kyrk.

Moreover, within the same Section III of Chapter 8, Keynes argues that a substantial income reduction may result in consumption exceeding income, being fueled by the liquidation of accumulated financial reserves. He extends the reasoning to the aggregate level by stating that aggregate consumption may exceed real income due to government budget deficits, financed by debt and aimed, for example, at providing for unemployment benefits or similar measures. When income and employment fall to a 'low level', aggregate consumption will fall less than real income has fallen, due to both the usual conduct of consumers and possible government policy. This explains why fluctuations are of limited amplitude and the decrease in employment once started does not reach extreme consequences. In this reasoning Keynes is stating the *possibility of asymmetry* in the marginal propensity to consume. Another crucial element of the approach to consumption as a social phenomenon.

An echo of the principles of the approach based on the social significance of consumption can be perceived even when Keynes introduces the subjective factors influencing the consumption propensity function, which as argues for their large part are traced back to the "consumer tastes" of traditional theory:

'The subjective factors, …., include those psychological characteristics of human nature and *those social practices and institutions* which, though not unalterable, are unlikely to undergo a material change over a short period of time except in abnormal or revolutionary circumstances.' (Keynes, 1936, p. 91)

'These eight motives might be called the motives of Precaution, Foresight, Calculation, Improvement, Independence, Enterprise, Pride and Avarice; and we could also draw up a corresponding list of motives to consumption such as Enjoyment, Shortsighted-ness, *Generosity, Miscalculation, Ostentation and Extravagance*.' p 108

The relevance of all the elements which are extraneous to the traditional theory is, however, explicitly limited to short-period fluctuations during which the adjustment of expenditure to changes in income in accordance with '*more permanent psychological propensities*' can only take place imperfectly.

As is also the case with more general aspects of Keynes' contribution, theoretical principles explicitly contradicting the marginalist main stream - in this case, the social relevance of consumption the irreversibility and the continuous acquisition of consumption standards and finally the residual nature of saving - are combined with a reference to traditional principles - in this case, the existence of an optimal allocation between consumption and savings. The element that makes conflicting principles apparently reconcilable is the distinction between short-run and long-run phenomena. [26] In this way, Keynes opens a line of analysis that will be widely followed in later years. [27]

An echo of the principles of the analysis of consumption develop by the American institutionalists can also be found in other earlier works by Keynes. Keynes (1930) uses a Veblen's classification of needs in 'absolute' and 'relative' and writes:

> 'needs which are absolute in the sense that we feel them whatever the situation of our fellow human beings may be, and those which are relative in the sense that we feel them only if their satisfaction lifts us above, makes us feel superior to, our fellows. Needs of the second class, those which satisfy the desire for superiority, may indeed be insatiable; for the higher the general level, the higher still they are.' Keynes, (1930), p. 326 quoted by Mason (1998) p. 109

This passage from 1930 and most of those from the General Theory that we have quoted have been regarded in the literature as non-mainstream elements of Keynes' analysis of consumption. D'Orlando and Sanfilippo (2010), for example, consider them as analytical elements compatible with the principles "*underlying contemporary behavioral models*", referring to Tversky and Kahneman 1974 and Carabelli and Lanteri 2011. Drakopuolos (1992), on the other hand, singles out the same passages of General Theory as elements extraneous to the Marshallian marginalist tradition and links them directly to Veblen, thus ignoring developments due to Hazel Kyrk and institutionalist economists who transform Veblen's principles into a more comprehensive theory of consumption. The idea that Keynes inherited from the empirical literature on consumption, based on Family budgets data, the assumption that the level of income is the main determinant of consumption is rather generally shared. In qualifying the relationship, however, he also seems to inherit principles

[26] The interpretation of Keynes's contribution as a compromise between strongly innovative elements and theoretical principles inherited from traditional theory and the potential weaknesses arising from this heterogeneity is originally proposed in Garegnani (1979)

[27] In the late 1940s, Duesenberry (1948 and 1949) proposed an analysis of consumption that seems to take up and extend the Keynesian synthesis. Duesenberry uses the principles belonging to the social relevance of consumption approach, whose authors are not mentioned except for a fleeting reference to Veblen, to explain the behavior of consumer spending in cyclical fluctuations. These principles, however, are integrated with marginalist principles to determine through utility maximization the long-run average propensity to consume. In this regard and on the weakness of Duesenberry's approach in comparison with Friedman's theory, see Trezzini (2012).

reminiscent of the theoretical elaboration and empirical analysis that developed in the United States within that literature as an outgrowth of Veblen's thought.

Looking for evidence of a connection between Keynes and Kyrk

It is therefore possible to wonder whether there also exists a link between Keynes' elaboration in General Theory and the literature of which Kyrk's work constitutes the most mature and complete expression. Arguing definitively that Keynes was referring exactly to that literature is not easy. However, we can move in this direction by considering some indirect but certain elements of connection.

First, Keynes' general attention to U.S. economic circles is witnessed by two important journeys to the U.S., which he made in the years before the publication of the General Theory (in 1931 and 1934)[28] Both the travels to the U.S. were due to Keynes' participation to economic policy academic debates.

The first time, in the summer of 1931, Keynes was invited by a Chicago political scientist and economist, Quincy Wrigth, to participate in a conference on unemployment organized by the Harris Memorial Foundation, a foundation linked to the University of Chicago that focused on policy. In Chicago, although declining, the influence of institutionalism founded by Veblen was still strong and since 1925, Hazel Kyrk was both in the department of Economics and in that of Home Economics of the University of Chicago (see Cicarelli, J. and Cicarelli, J. (2003)) . Keynes' presence in the United States, however, was centered on conferences and lectures on topics that could hardly lead to a confrontation on the issues of the determinants of consumption expenditure. At the New School in New York he gave lectures on the relation between prices and economic crisis. In Chicago, he gave a conference at the Chicago Council on Foreign Relations, on the German debt moratorium proposed by President Hoover shortly before. He also gave two lectures at the University of Chicago on his interpretation of the 1929 crisis. Keynes adopted, Skidelsly explains, the theoretical approach of the *Treatise*, arguing for the need for expansionary monetary policies to contrast deflation.

In his second trip in 1934, on the other hand, Keynes's meetings and lectures were centered on New Deal policies, with meetings with Roosevelt-supporting politicians, with Roosevelt himself but, also, with bankers and businessmen hostile to the president's policies. On the whole, then, if these trips reveal Keynes' attention to U.S. academia and politics unusual for his milieu - and Skidelsky's biography on the whole paints Keynes as particularly attentive to American scientific developments

[28] See Skidelsky (1992) pp. 389-92 Chapter 11, American Interlude; and 504-14, Chapter XIV section 4 An American Journey).

– we do not have documental poofs that the institutionalist economists he did meet had drawn his attention to the development of the social relevance approach to consumption.

The Reviews on the *Economic Journal*

A significant evidence about the link between the non-marginalist principles of Keynes' consumption analysis and the development of consumption theory by Kyrk and the American institutionalists comes from studying Keynes' activity as Editor of the Economic Journal. Keynes held that position from 1911 and until 1945 . In 1911 Keynes was very young (28) and was appointed on a proposal by E. Cannan, endorsed by Edgeworth. Keynes carried out his role as Editor from the beginning, and throughout the period, with great dedication and efficiency.

From 1912 to 1939, because of his young age, he was joined by an Editorial Board. Later he had joint editors: Edgeworth, between 1919 and 1926; D. H. Macgregor, between 1926 and 1934; and, finally, Austin Robinson, between 1934-45.

Moggridge (1990) proposes an outline of Keynes's activities as an editor from which one can see not only extraordinary dedication and efficiency but also a very strong scholarly guiding role. A practice that appears unusual today is that Keynes did not submit for refereeing his own essays or papers that he intended to publish quickly. He was overall reluctant to send contributions to referees and often evaluated them directly. Moreover in sending essays to possible referees he often guided their opinion and, considering his authority, this certainly was an effective guidance. Finally he did not always respect the directions of the referees when they diverged from his own opinions. (Mogridge documents that Keynes sent N. Kaldor an article by M. Kalecki on which J. Robinson had expressed a positive opinion, accompanying it with a very critical note. Kaldor rejected it; the article was published in Review of Economic Studies as "A theorem on technical progress.").

He limited his being partisan only when of the submitted contributions concerned his own work, since the time of Treatise on Money, in fact, he assigned these contributions either to D.H. Robertson or to A. C Pigou for evaluation. Keynes did a lot of work entirely on his own, with very rapid acceptances of complex essays; equally quickly he stimulated radical revisions - and evaluated subsequent versions - of papers that were initially rejected but that he thought were somehow interesting.[29]

[29] A paper by L. Robbins on interpersonal comparison of utility was accepted by Keynes in three days. A contribution on the Tax Curve was sent to Keynes in early July 1940 by an author completely unrelated to the world of economic research, an engineer, boat builder, who wanted to send his contribution to The Times. Keynes suggested converting it into a contribution for the Economic Journal in late July, and the essay was published in December 1940. The final version of some of the essays was the result of a long debate between Keynes as editor-referee and the author. Most important of all was Harrod's well-known 1939 essay that sets the general terms of growth analysis and which Keynes remembers as

Keynes also exercised his scholarly direction by inviting many authors to contribute on specific topics[30] and opening debates on economic policy issues such as Monetary Reform or National Debt, in which he himself participated. Overall, Moggridge offers a picture of Keynes as an editor also describing it through the words of E. Cannan:

> Even a critic such as Edwin Cannan could remark in a memorandum of 1 February 1934 […]: "He may not be exactly the ideal editor, who is, I suppose, one who has no ideas of his own and a great respect for those of other people, but his most hostile critic cannot say that the Society has not prospered during his editorship." Moggridge 1990 p. 152

This intense scholarly direction of the Journal makes it plausible that Keynes, although he was responsible for the articles in the notes and memoranda, and from 1919 his editorial colleagues were "responsible for reviews official publications and the noting and listing of new books." (Moggridge (1990) p. 144) was well aware of the choices of texts to be reviewed and of the judgments made in this regard. It thus becomes interesting to search among the Economic Journal reviews for possible traces of the works of the institutionalist authors of the economics of consumption as a social phenomenon.

In issue 139, September 1925, a review by H. Reynard of a reprint, (the tenth), of Veblen's Theory of Leisure Class, published in 1924, appeared. This review highlights how Veblen asserts that the vices of the leisure class are generated by emulation and describes Veblen's theses about the origin of symbols and fashions that enable the display of wealth and affluence. Overall, the presentation is detached, sarcastic, and ultimately critical.

In contrast, a review by D. H. MacGregor (who just from 1926 was co-Editor of the Journal) of Hazel Kyrk's *A Theory of Consumption* appears in the issue 142 of June 1926. The review presents the work in a generally positive way. Kyrk's work, it is argued, points to the need to develop an economics of consumption and is an early contribution to it. In Kyrk's volume, an attempt is made, according to MacGregor, to identify the system and organization of rules that determine consumption and influence the determination of production.

In Kyrk's view, according to MacGregor, consumption is not limited to the use of goods, and the consumer is not the passive 'receptacle' into which a flow of goods produced ends and acts only as an agent that levels marginal utilities. Three aspects of consumption are highlighted by Kyrk and all three exert an active role in the economy and are related to overall welfare: consumption

the longest and most laborious revision process in which he became involved in his role as Editor. Often these processes began with an encouraging rejection that led to radical rewrites along the lines suggested by Keynes.

[30]Keynes invited Robertson to write on the Coal strike in 1912 and 1926, Irving Fisher on the Gold Standard in 1913, Luigi Einaudi on public finance in Italy in 1915. In '24, Keynes commissioned Piero Sraffa to write an obituary of Maffeo Pantaleoni; in 1925 Keynes together with Edgeworth noted an article by Piero Sraffa in the Italian Journal *Annali di Economia* titled 'Sulle Relazioni fra costo e quantità prodotta' and commissioned to the young Italian a development that came out in the December 1926 issue of the Economic Journal.

determines i) the final purposes of life, ii) the things which society chooses to produce and iii) the way in which the economy uses them. The reviewer does not precisely expose the mechanisms through which, according to Kyrk, these interactions occur, i.e., he does not expose the interactions between consumption imitation, standard formation, technical innovation and again imitation, standard formation, etc., which we considered in the first section. MacGregor points broadly to the hypothesis advanced by the author that consumption actively exerts control and has important effects on economic activity by affecting firms' choices of techniques. The study of these aspects of consumption, thus, is as important as the study of the choice of techniques of production.

In the review, moreover, it is clearly understood that Kyrk explicitly criticized marginal utility theory both for its emphasis on individualism and for its implicit assumption about consumers' abilities to compare the utilities of different goods (hedonic tests of utility).

The reviewer believes that further analysis would be needed to develop a theory that replaces that based on marginal utility, however, he understands that the study of the motivations for consumption expenditure centered on the notion of consumption standards goes precisely in this direction and that this analysis drives Kyrk to the study of the evolution of standards over time. The chapters on this topic, it is argued, give consumption theory a substance and content similar to those given to supply analysis by the study of the organization of production.

The final judgment on these principles appears positive but not crystal clear:

> "True to the best modern psychology, the key to the consumers' activity is found in what may be called long-period purposes, but limited by conventional obstacles. For the exploration of this hinterland, some new paths are made and followed, and diffuseness can be excused where so much is brought under review." p.242

MacGregor concludes by mentioning that this "commendable" contribution originally was an essay for an academic award and was turned into a book with the well-deserved approval of such examiners as J.B. Clark, J. L. Laughing and Wesley Mitchell.

Another significant presence among the *Economic Journal* reviews is in Volume 38 of December 1928, where there appears a review of J. Peixotto's 1927 work by Felix Flugel a brilliant teacher at the University of California. The review presents Peixotto's central thesis that teachers at the University of California are paid less than would be required to maintain a standard of living commensurate with their educational level and social position. However, it fails to grasp the theoretical point: following Kyrk's thesis, which is explicitly cited, Peixotto argues that academics' incomes are insufficient to access the standard of consumption that would allow them to be identified and to identify themselves with the specific social group of professionals with which academics are in contact and socially confronted.

Conclusions

At the time of the development of the General Theory, consumption analysis constituted a highly developed branch of economic analysis. Primarily empirical, it had originated not from abstract theoretical interest but from policy analyses that only later led to the identification of explanatory theoretical principles. This branch of analysis had developed considerably in the United States where the characteristics of that society led to an emphasis on social and habit characteristics of consumption units greater than in Europe. Hazel Kyrk's work is part of this stream of analyses and picks up the theoretical legacy of Veblen by making explicit how some of the principles developed by this author could lead to a theory of the determination of consumption expenditure both at the level of the individual unit of consumption and at the aggregate level. These principles explain the expansion in time of the level of aggregate consumption in growing economies and the interaction of this expansion with technical progress.

Far from being the beginning of the analysis of the determinants of aggregate consumption expenditure, as advocated by the outdated Stylized History advanced by Friedman, the analysis that Keynes develops in the *General Theory* appears to be the result of a thorough knowledge of this literature. The elements Keynes introduces into his analysis that are independent of the Marshallian tradition are entirely traceable to the literature under consideration. The most important innovative element, the dependence of consumption on income level, was an outcome of the analyses that extended and tested Engel's law, while the social and habit elements that shape this relationship seem to derive from knowledge of the theoretical elaboration of which Hazel Kyrk seems to propose the most mature formulation. Thus, we have considered i) an early work by Keynes, ii) his interest in and travels to the U.S., in Chicago in particular, and iii) the reviews that appeared in the Economic Journal he edited, as important clues, though not irrefutable evidence, that allow us to assert that the non-marginalist theoretical elements of Keynes' analysis of consumption derive from the works of the theoretical approach to consumption as a social phenomenon.

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