Lessons from the Buenos Aires Time Use Survey

A Methodological Assessment

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INTRODUCTION

Following the Beijing Platform for Action that appealed to countries to make visible the full extent of women's contribution to economic development by "conduct[ing] regular time-use studies to measure, in quantitative terms, unremunerated work" (1996:209), Latin America has seen an upsurge of Time Use Surveys in the last ten years. From the initial attempts in Dominican Republic, Mexico, Nicaragua and Brazil to the more recent time use surveys in Bolivia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala and Uruguay, Latin American TUS have flourished.

There is no single way of collecting time use data, and indeed Latin American TUS present a wide range of methodological approaches. However, with the notable exception of the 2001 Cuban Time Use Survey –a stand-alone Eurostat-type survey– most of the Latin American TUS have been modules attached to ongoing household surveys collected by National Statistical Offices (labor force, income and expenditure or living conditions surveys) and have taken the tasks list form, either in their short-list version, the stylized-diary version or the 'exhaustive'-list version[2].

Supported by the women's movement and in the spirit of the Beijing Platform for Action, the Buenos Aires Legislature passed a law at the end of 2003 that mandated the Buenos Aires Executive Government to collect information on the time use of women and men in the City of Buenos Aires (Consejo Nacional de la Mujer, 2006). The time use survey should aim at measuring the whole of women's contribution to the economy and produce data able to inform the design and implementation of gender-aware public policies. As a result of this mandate, the Buenos Aires Time Use Survey was collected in November-December 2005 by the Directorate-General of Statistics and Census of the City Government as a module of its Annual Household Survey.

Buenos Aires City, the biggest Argentinean city and its capital district, accounts for 8% of the country's population according to the last population census. The Buenos Aires TUS is representative of the Buenos Aires City population between 15 and 74 years living in residential households, 2.13 million people out of the 3 million people living in Buenos Aires[3]. It is representative of 1.18 million women and 0.96 million men, reproducing the

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[2] For a review of the information collected through modular TUS, see Milosavljevic and Tecla (2007). For a conceptual review, see Esquivel (2007).

[3] Most of this difference between the Buenos Aires TUS target population and Buenos Aires City total population is due to the age threshold, since neither children below 15 years of age nor seniors over 74 are covered by the BA TUS. 80% of Buenos Aires total population (2.4 million people) is between 15 and 74 years of age. However, there are 260.000 persons between 15 and 74 years of age who are not represented by the BA TUS, since they live in collective households as room tenants or in shanty-towns. Information on

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City feminized population structure. Giving sampling and weighting procedures, other demographic, social and labor market indicators also reproduce those of the City as a whole.

The Buenos Aires TUS is the first one to be collected in the country following the publication of United Nations guidelines (UNSTAT, 2005)[4]. It is also a unique experience in the Latin American context since, in spite of being a module attached to an ongoing multi-purpose household survey, it departed from the widely used tasks list approach to record time use data using the 24-hour recall activity diary[5].

Having been collected as a result of a cooperation agreement between Universidad Nacional de General Sarmiento and the Directorate-General of Statistics, the Buenos Aires TUS is also marked by an unusual and fruitful collaboration between academics – typically only 'end users' of statistical information– and statisticians. This fact allowed for finding satisfactory solutions to many of the tensions involved in designing and collecting a module attached to an ongoing survey, and shows up in many of its methodological features.

This paper describes the main methodological features of the Buenos Aires Time Use Survey and presents some results that highlight them. It emphasizes the methodological lessons that can be derived from it that are particularly useful for advocating its replication at a wider scale. It is therefore a methodological paper and not a results report.

1. THE BUENOS AIRES TIME USE SURVEY: METHODOLOGICAL FEATURES

The Buenos Aires TUS was a module on the 2005 Buenos Aires Annual Household Survey (DGEyC, 2006a) applied to two out of six of its tranches. The module comprised a selection grid cover for selection of the household member, which included a list of reasons for non-response –in case it happened–, plus an activity diary followed by three probing questions at the end. A question asking whether the day reported was typical was also added to act as control.

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these households was collected through separate AHS fieldwork –organized around a single visit to each shanty-town during a weekend day–, in which the time use module was not included.

[4] There was a short module (only yes/no questions to ten tasks plus time allocated to perform them *all*) attached to the 2001 Living Conditions Survey (see Esquivel (2006) for further reference). Also, in 1998, a time use survey was collected in the City of Buenos Aires as part of a National Women's Council research project, but only women older than 14 years of age were interviewed (see Rupnik and Colombo, 2006).

[5] The BA TUS resembles in many ways the 2000 South African Time Use Survey –albeit in a smaller geographical scale. See Budlender (2007) for a comparison.

The activity dairy started 4AM "yesterday" and lasted till 4AM of the interview day[6]. The diary was a closed grid consisting on 48 30-minutes long time slots that gave room for up to three consecutive and/or simultaneous activities. Every activity had a location mark.

This diary was filled in by interviewers (not by respondents) using a series of questions that prompted respondents' recall. Respondents reported in their own words their previous day's activities, starting with their waking up time and ending when the respondent went to sleep[7]. These questions gave the framework to what we call "yesterday" and avoided both unnecessary repetitions of prompting questions (*What were you doing between …[hour] and … [half an hour later] yesterday?*) during the time when respondents were sleeping, minimizing the registry of errors in diaries' starting time[8].

A special set of questions was designed to ease the reporting of paid working hours and at the same time avoid missing simultaneous activities performed while doing paid work. In general, there was a strong emphasis on minimizing respondents' recall effort and interview time, as a pilot test demonstrated that interview time was critical in reducing refusal rates –particularly bearing in mind there were high chances the time use module would be collected immediately after the core survey[9]. As a result, over 80% of interviews were conducted in 20 minutes or less.

There was no pre-defined week day for any given household or respondent, as again this could deter prospective respondents from answering the module. Collected days of the week were monitored in the process of receiving completed diaries, and the fact that fewer interviews were conducted on Sundays soon became clear. Attempts to increase Saturday diaries were not very successful since their relative underrepresentation was related both with fieldworkers working schedules and household members' willingness to answer to the interview on Sundays. Results are therefore representative of weekdays and weekends and of the whole week, but no representation (i.e. population weights) is calculated on a daily basis. There final sample size was 1425, with 16% Mondays, 16%

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[6] During the pilot test, an alternative time schedule with moving starting and ending hours (based on the time of the interview) was tried but abandoned because it did not improve recall quality and was thought to increase fieldworkers' burden and eventually their errors.

[7] In case the respondent did. Also, a question 'confirming' that the person slept between 4AM and the time she/he woke up/ from the moment she/he went to sleep to 4AM of the day of the interview was added to check for sleeping time.

[8] This aspect is emphasized by Budlender (2007). Fieldworkers were instructed to fill in sleeping time once the interview finished.

[9] The pilot test showed that prospects respondents asked about interview length before opting in/out of the survey. Answering to official surveys is protected by the Statistical Secret Law, and is neither compulsory nor paid for in Argentina.

Tuesdays, 15% Wednesdays, 13% Thursdays, 18% Fridays, 7% Saturdays and 14% Sundays.

All in all, the 11% BA TUS rejection rate[10] was considered satisfactory –and significantly lower than rejection rates reported in the international context[11].

All diaries were post-coded by fieldworkers after the interview, checked for completion when received and eventually edited. The probing questions allowed checking whether any of the activities mentioned by respondents were done for pay –thus helping post coding them– and capturing of child care time which goes frequently underreported.

Only one randomly selected household member, either women or men between 15 and 74 years of age, answered to the diary. This contrasts with other surveys that either target two randomly selected household members (the 2000 South African TUS) or all household members above a certain age (most of Latin American TUS[12]). The relative small average size of the Buenos Aires City households (2.6 members) provides the rationale behind the choice of the individual as the unit of analysis.

Also, the fact that only one diary per interviewed person was collected was decided in order to minimize fieldwork burden (because it would have required coming back to the household) and ultimately avoid confusion[13].

The BA TUS respondent might coincide (or not) with the core survey respondent. Like many other multi-purpose household surveys, one adult household member could answer to the whole of the Annual Household Survey, irrespective of her/his household position (head, spouse, daughter/son, etc.). The AHS respondent, however, might or might not be chosen to answer to the time use module. This could result in very long interview times when the survey and the module respondent coincided, and on losing the module when not finding the selected member. An extra visit and a telephone interview (as a last resort) were allowed. Also, a new member random selection was allowed if it was the selected member could not be contacted after a reasonable number of attempts. Obviously, the probability of being chosen was higher the smaller the household[14].

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[10] Rejection occurred in 176 cases. Further 26 cases were left out of the survey because they were out of age-range.

[11] Again, the 2000 Cuban TUS is an exception, since it reported a non-response rate of 5% (ONE, 2002).

[12] See Esquivel (2007) for a review. It is not clear, however, if in all cases household members self-reported on their activities, or one household member answered for them all.

[13] Instruction to fieldworkers was "*always* ask about yesterday", irrespective of the day you find the respondent.

[14] I.e., it is equal to 1 in one-person households.

As a result of the member selection strategy, 32% of respondents to the Buenos Aires TUS were not AHS respondents. A crosstab between household type and selected members shows that the bigger and more complex the household, the higher the chances of choosing non-heads/spouses[15], indicating that random sampling was successful.

As mentioned before, up to three simultaneous activities were allowed in each time slot, but these were not hierarchical: there was no 'main' and 'secondary' activity, as respondents answered to the question "*Did you doing anything else between …[hour] and … [half an hour later]?*" once or twice and reported on their activities. Simultaneity was captured by asking *"Did you do (the second activity) at the same time as (the first activity)?"* and, in case of three activities, asking whether the third activity was performed at the same time as the first and the second activities. Though complex, the answers to these questions were filled in a built-in grid in every time slot (see Activity Diary form) by introducing yes/no codes, which eased interview flow. Consistency checks between simultaneity and location were performed later to correct for mistakes[16].

This detailed information allowed for two different methods to assign minutes to activities. 'Simple time' resulted from assigning average minutes to each of the activities performed in a given time slot (30 minutes where only one activity was reported; 15 minutes to each where two activities were reported; 10 minutes where three activities were reported) irrespective of their being performed either simultaneously or consecutively. The advantage of the 'simple' time assigning rule is that all respondent's activities add up to 24 hours a day. The obvious drawback is that the more simultaneous activities performed, the less time is allocated to each of them.

Having each and all possible combinations of simultaneous/ consecutive activities (11 combinations of the number of activities recalled and yes/no answers to the simultaneity questions) allowed for assigning 'time considering simultaneity' to all activities, accruing the full length of the time slots if they were the unique activity or performed simultaneously with one or two other ones, or accruing some time (10, 15 or 20 minutes) if the activity was performed in a consecutive fashion with other activities in the same time slot, or was performed simultaneously but there was a non-simultaneous activity in the same time slot (see the time assignation chart in the Annex).

There were specific provisions while training fieldworkers on how to proceed where more than three activities were reported in a given time slot. Instructions aimed at preserving events –the total duration of an activity– that comprised more than the conflictive time

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[15] 57% of survey cases were household heads, 25% were spouses, 12% were daughters/sons and 6% were other household members. In weighted terms these proportions become 48%, 28%, 16% and 7% respectively.

[16] Clearly, simultaneous activities have to be performed in the same place.

slot and prioritized care activities. However, there was very little need of these provisions because respondents very rarely reported more than three 'true' activities, as defined in the Activity Classification System used.

The Buenos Aires TUS Activity Classification System was based on the first trial International Classification of Activities for Time-Use Statistics (10-major categories ICATUS) and had up to three digits, although the third digit was used to differentiate certain activities (prompted-spontaneously reported; corrected while editing; etc.) rather than to disaggregate them. This has led to quite 'aggregated' activities as compared to the 16-major categories ICATUS or other developed countries' Activity Classifications. This feature is consistent with the way activities are reported and registered within the 30 minutes time slots, and will be developed further below.

Only one SNA-work category was used (100) and the subcategories within SNA-work distinguished between first and second jobs rather than employment status.

ICATUS' 200 and 300 activities were not used, since very little (if any) primary production for self consumption takes place in the Buenos Aires City urban context and there was no need to differentiate between production for 'establishments' and 'non-establishments'. The fact that specific questions on labor force participation were asked as part of the core survey (to the survey respondents and to all household members above 10 years of age) make this omission relatively safe. Clearly, the BA TUS did not have among its objectives to better measure the size of the labor force and took employment status as given. As the reference periods differed (last week for labor force information, "yesterday" for the module) there is no way of performing exact consistency checks between the two sources of information and none is considered superior[17].

Other major activity categories are related to unpaid care work (400, Household maintenance, management and shopping for own household; 500, Care for children, the sick, elderly and disabled for own household; 600, Community services and help to other households) and non productive activities (700, Learning; 800, Social and cultural activities; 900, Mass media use; 000, Personal care and maintenance).

A particular note should be added on the definition of child care. Supervision and being on call are regarded as caring activities, even if they are 'passively' performed (as opposed to the active content implied in the very concept of 'activity'). This feature was particularly emphasized in fieldworkers' training. The Activity Coding System therefore differentiated between active and passive child care, as well as between spontaneously reported childcare and that reported as a result of the abovementioned probing question.

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[17] It could be possible that someone was unemployed or inactive last week but working for pay yesterday. This is not an inconsistency. Results show that only 3.3% of those who reported doing paid work were either inactive or unemployed according to their employment status.

2. THE BUENOS AIRES TUS QUALITY INDICATORS

As already mentioned, the Buenos Aires TUS had a low non-response rate (11% of targeted individuals in households). Those who answered did it thoroughly: the average number of episodes registered in each diary is 21 (23 among women and 19 among men), indicating fairly complex recall reports.

Reports on the editing process that took place during two months following the period in which the survey was collected show that even if code changes were many, most corrections were marginal within any given diary and major editing was required in very few cases (10 out of the 1425 survey cases). Indeed, over 93% of diaries required only marginal or no corrections at all.

If simultaneous activities are computed at their full length (using the 'total time considering simultaneity' assignation rule) the average day stretches to 28:15 hours. The highest simultaneity ratios were recorded in Social and cultural activities (43%), Mass media use (37%), Community services (34%) and Care for children, the sick, elderly and disabled for own household (32%).

3. CHALLENGES AND LESSONS LEARNT

3.a The Buenos Aires TUS as a module to an ongoing household survey

In the Latin American context, there has been strong advocacy for a modular approach to time use collection that is evident in ECLAC works (as in Milosavljevic and Tacla, 2007) and UNIFEM-supported expert meetings, like the one that took place in Rio de Janeiro in June 2007. I have argued elsewhere (Esquivel, 2007) that supporting a modular approach only on costs considerations obscures the identification of both the advantages and the risks of choosing it instead of stand-alone time use surveys, and eventually jeopardizes the possibility of building satisfactory methods of time use data collection within the constraints of the modular approach. I support a modular approach to time use data collection in our countries, but certainly not as a second best option[18].

Indeed, advantages of a modular approach to time use data collection are many and exceed the obvious cost considerations. Sometimes, as in the Buenos Aires TUS, the very existence of an ongoing household survey like the AHS makes the only chance for the TUS to be collected[19]. Deciding on survey frameworks, selecting households to be

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[18] That in most of the debate the modular approach is equated to tasks surveys is discussed below.

[19] The Buenos Aires Annual Household Survey is indeed a quite particular endeavor, and reflects the strength and capacity of the technical team working at the Directorate-General of Statistics. It covers,

surveyed, training fieldworkers and conducting fieldwork to collect a time use module become a marginal effort –as opposed to a new survey that might exceed both the budgets and the technical/operational capabilities of statistical offices.

In methodological terms, the most obvious advantage is that the core survey provides for information that usually exceeds in scope and detail the data that would be collected by a stand-alone TUS survey, particularly that on income and other socioeconomic stratification variables.

In the case of the Buenos Aires TUS, this information is perfectly compatible with that of the module and can be used together with it[20]. Indeed, the Buenos Aires TUS database comprises both the time use module of all respondents surveyed *and* the household and individual information of *all* members of the household to which the respondent belongs. The availability of this information improved both ex-post analysis and data cleaning, as it has allowed for editors to detect errors that could be eventually rectified, as in the case of living-in paid domestic workers whose activities were initially coded as housework and unpaid care work[21].

The other side of the coin is that a TUS collected as a module is a child of the household core survey it is attached to: it shares all its virtues *and* its weaknesses in the form of operational definitions, global non-response rates, survey framework and fieldwork. The abovementioned considerations on employment status information collected by the AHS and taken as a given to analyze the BA TUS are directly related to this compromise between the core survey and the ad-hoc module. Also related to this, the Buenos Aires TUS suffers from the 'attrition malady' of the higher income strata households, since these households have in fact higher overall and income non-response rates. The way the AHS is collected did not allow for introducing the module in the special shanty-town and collective households tranche. Neither did it cater for seasonality in time use, since AHS is only collected in the last quarter of every year.

There was though one 'ex-post' departure between AHS definitions and the BA TUS definitions, and this is related to what has been termed 'special' cases in child care activities.

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expands and adds detail to the Labor Force information collected in Buenos Aires by the National Statistical Office (INDEC) on a continuous basis.

[20] This might not be the case if the module is applied later to the core survey population respondents, as in the case of the 2000 Mexican TUS.

[21] The AHS definition of household comprises living-in domestic workers as household members. Other surveys, like the Continuous Household Survey (EPH) collected by INDEC consider living-in domestic workers as a separate household living in the same dwelling.

According to the Activity Coding System, child care performed for the benefit of own household children is coded under the 500 heading, which offers a wide range of subcategories (physical active care; passive care; activities related to children's education; activities related to children's transportation; etc.). In contrast, child care performed for other households' children is coded under the 600 heading with far less detail. The cases that called editors' attention where those in which childcare was performed by respondents (and located in 'own household') but where there were no children in the household. Some were coding errors (one such a case was a father caring for her disabled daughter aged 23, which was edited as adult care) but in many other cases respondents lived alone or were too young to be grandparents. Indeed, the vast majority of these cases were divorced parents (fathers) whose children do not live with them during 'most of' the week, therefore not complying with the 'household member' definition[22].

In time, it was decided that these cases would remain as care for own household children irrespective of the fact that these children were excluded from the household[23]. This decision implied favoring a family definition of care over a household definition of care even though all activity definitions refer to 'households' and 'non-households' and not to 'relatives' and 'non-relatives'. Controversial as it might seem, it allowed for a more refined and unbiased measurement of child care and the possibility to making visible forms of child care performed by adult men, that would have gone undistinguished if coded under the 600 heading.

Ad-hoc modules are not generally favored by household surveys designers, as they fear they might spoil core survey information by raising non-response rates and/or compromising the continuity of long term series. They are usually collected after the core survey has finished and its information has been 'secured'. The Buenos Aires TUS is no exception and the restrictions imposed by the AHS design were built-in in the module design, precluding those features that could raise drop-out/ rejection rates (e.g. long interview times; fixed week days to collect information on; etc.).

However, some methodological features had to be guaranteed in spite of the core survey design, particularly the way respondents were selected: there was no possibility of giving up on randomly selecting the module respondent if huge biases and

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[22] This definition is meant to distinguish between living-in domestic workers and non-living in domestic workers!

[23] Maintaining this criterion required to check for other 'correctly coded' cases (in terms of the AHS definition), i.e., caring for own children when children live in other household coded under 600. This was done by analyzing activity descriptions (see Diary form), but no cases where found.

overrepresentation of population not in the labor market was to be avoided[24]. The Directory-General's experts advised on allowing replacements after the second visit, considering that the most difficult part –that to getting households to open their doors and accept responding to the survey– was in those cases already achieved. Checks for socioeconomic structure and labor force status indicate the BA TUS surveyed population does not significantly differ from that of the City living in households where there is at least one member between 15 and 74 years of age[25].

Fortunately, there were unexpected synergies between the module and the survey, particularly by allowing for an extra revisit (aside from that already guaranteed in the AHS). The possibility for revisits was instrumental in collecting better information and allowing fieldworkers to check on data the time use module respondent had not provided, decreasing non-response rates on particular questions (like those related to hours of paid work and income from paid work). Indeed, double-checking was two-sided and took place at many stages.

3.b The Buenos Aires TUS as a 24-hour recall activity diary

The Buenos Aires TUS proves that in some circumstances and provided the core survey is flexible enough to cater for very specific requirements (i.e., respondent selection; sufficient week day variability) it is possible to collect a time use module that follows the 24-hour recall activity diary form.

Indeed, there is no need to equate the modular approach to time use data collection with tasks list surveys. Conversely, time use surveys based on activity diaries needn't be collected as stand-alone surveys. Even more: they needn't be self-administrated to be activity diaries in the first place![26]

Modular approach supporters frequently advocate for tasks list surveys. Most possibly, tasks list surveys are preferred because they are less demanding on fieldworkers

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[24] It is also not possible to allow for a member of the household to respond on someone else's activities, a restriction that is not always respected when conducting tasks surveys or in cases when very young children (older than 10 or even older than 5 years of age!) belong also to the TUS target population.

[25] These checks were performed comparing the BA TUS population to that of the AHS population between the ages of 15 and 74.

[26] Equating activity diaries to self-administrated diaries is a 'developed-country' bias, sometimes supported by developing country's TUS experts. It implies that developing countries cannot collect information based on activity diaries because of their population characteristics (i.e., rural and illiterate populations) and misses the chance of seriously considering whether it is feasible to follow the 24-hour recall activity diary.

(though they can become too long and a burden to respondents[27]) and impose minimal requirements to the core survey they are attached to. However, I do not believe that illiteracy rates could justify the collection of tasks list surveys as opposed to 24-hour recall diaries.

Among the many drawbacks tasks lists surveys suffer from are their extreme sensitivity to list length, aggregation and wording and the practical impossibility of correctly identifying simultaneous activities[28]. Examples of these features for the Latin American context are provided by Milosavljevic (2006), who identifies time devoted to certain activities as strongly correlated to the length and detail of the tasks list; and Esquivel (2007), who describes some attempts to include pre-selected simultaneous activities in stylized diaries (a version of the tasks list survey) which failed as they clashed with the logic of all other non-simultaneous activities.

If tasks list exhibit a 'top-down approach', having started from very short activity lists and developed into more detailed and in-depth lists, the activity diaries show the opposite approach to time use data collection. They collect detailed information on time use activities that is subsequently post-coded and eventually aggregated according to the survey's activity classification system, following a 'bottom-up approach'[29].

Diaries are less prone than tasks list surveys to reflect designers objectives and views, even if they are not 'value-free' data collection instruments. At the very least, they don't put words into the respondent's mouth, though they shape answers by selecting time slots' length (which signal the respondent a minimum significant time for an activity to be so) and by filtering them through the Activity Coding System.

The Buenos Aires TUS introduced the interview by signaling *"the many things one does during a day: from having a shower while listening to the radio, to taking care of one's kids, working, talking to others, having dinner or sleep".* This introduction, which was read aloud by interviewers, aimed at indicating respondents the kind of activities considered significant. Given the time slot length (30 minutes) and the previous introduction, respondents did not report on activities that were either too short or thought of as irrelevant (for example, blowing one's nose).

Activity diaries provide the only time use collection instrument that satisfactorily caters for the collection and analysis of simultaneous activities. It cannot be sufficiently

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[27] As in the 2000 Mexican TUS or the 2006 Ecuadorian TUS; see Mercedes Pedrero (2006) and CONAMU (2006).

[28] See Budlender (2007) and UNSTAT (2005) for an extensive discussion.

[29] The degree of statistically significant detail results from activity diaries can have depends on sample sizes: i.e., if sample size is not large enough, Coefficients of Variation can be too high to allow for meaningful activity detail. See section 4.b.

stressed that given the fact that unpaid care work is frequently performed in parallel with other activities –and socially undervalued– the absence of simultaneous activities implies an undue downward bias in its measurement, as respondents more frequently 'skip' their unpaid care work when socially more valued activities take place at the same time.

Even simultaneity is 'filtered' by the degree of aggregation implied in the Activity Coding System, though. Simultaneity is defined as *the performance of two (or up to three) different activities at the same time.* Since all actions that become aggregated in a single activity code (e.g. cooking and setting the table; feeding a baby, changing her/his nappies) become indistinct behind that code (e.g. "preparing meals", "actively taking care of household children") simultaneous activities can only take place between different activities (between "preparing meals" and "actively taking care of household children").

Conversely, some actions are too general and comprise many activities (e.g. "going out" can be composed by traveling to a cinema while talking to friends, watching a movie, eating out, etc.) so Buenos Aires TUS fieldworkers were trained to identify activities behind respondent's reports. Special training showing examples similar to these plus the correction of wrongly coded activities during fieldwork showed fieldworkers their mistakes and enhanced the process[30]. By the end of the fieldwork months, many of them knew the coding system by heart!

As it was stated before, the degree of aggregation in the Buenos Aires TUS Activity Coding System stems from the fact that time slots are 30 minutes long and only three activities can fit in (as opposed to the six activities 10 minutes long slots would allow to if there was room for three 'main' and three 'secondary' activities). Shorter time slots would allow differentiation within the abovementioned activities –feeding a baby would be different from changing her/his nappies, cooking would be different from setting the table– but would certainly make it extremely burdensome to conduct an interview that asks about the activities performed during 24 hours every 10 or 15 minutes… and practically impossible to answer to it.

The 24-hour recall activity diary minimizes respondent's burden –as opposed to self-administered diaries– by shifting responsibility to sampling design and fieldwork. Indeed, the quality of the data produced by the Buenos Aires TUS ultimately depended on the fieldworkers' ability to transform respondents' answers into diary activities able to be coded. In spite of their initial complaints, fieldworkers' post-coding was fundamental not

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[30] A frequent error at the outset was to read each of the lines of the 30-minutes time slots as if they were 10-minutest time slots. This was detected during training –when prospect fieldworkers had to fill in their own diaries– and in the first week of fieldwork, and corrected on the spot.

only to obtain the completed diaries in a timely fashion but to guaranteeing time use data was correctly collected in the first place.

Diaries allow for a more accurate measurement of the whole of the persons activities, since problems of 'missing activities', frequent in tasks lists survey, do not arise; rarely performed activities will simply come up less frequently and their total absence will never mean that the tasks list designer forgot about it. Also, diaries provide information for the chronology of events, i.e., not only the time devoted to a certain activity but also when that activity takes place.

4. THE BUENOS AIRES TIME USE SURVEY: SELECTED RESULTS AND THEIR RELATION TO METHODOLOGICAL FEATURES

4.a Time use estimates when simultaneous activities are not hierarchical

Time use estimates result from the time length assigned to activities, i.e., depending on whether 'simple time' –the time assigned to activities so that all respondent's activities add up to 24 hours– or 'time considering simultaneity' –so the total number of hours per person exceeds a 24-hour period– is used to calculate them.

None of these two ways of calculating time can be said to be truer than the other. However, since not all activities are performed simultaneously with others with the same frequency and duration, using 'simple time' results in a downward bias to activities more frequently performed simultaneously (unpaid care work, socializing)[31]. In the same breath, it overrepresents those activities less affected by simultaneity, such as personal care activities –particularly sleeping, which cannot be performed simultaneously. Indeed, considering sleeping average time puts Buenos Aires TUS aggregate simultaneity in a proper perspective: if non-sleeping time amounts to 15:48 hours and simultaneity adds 4:15 hours to an average day, then over one quarter of average wakeful hours are devoted to two or three activities!

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[31] The difference in hours in an average day calculated using simple and adjusted times is the average simultaneity recorded in each activity category.

Table 1 Simple Time Totals. Activities on an Average Day by Gender

Activities on an Average Day (Monday through Sunday)	Total Population			Women			Men		
	Hours	%	CV (time)	Hours	%	CV (time)	Hours	%	CV (time)
Total	**24:00**	*100.0*	**2.7**	**24:00**	*100.0*	**4.7**	**24:00**	*100.0*	**5.3**
100 SNA work	03:52	*16.1*	6.8	02:45	*11.5*	9.0	05:14	*21.9*	9.6
400 Unpaid domestic work for own household	02:11	*9.1*	5.9	03:03	*12.8*	7.4	01:06	*4.6*	11.5
500 Unpaid care for children and/or adults for own household	00:41	*2.9*	11.0	00:58	*4.1*	13.7	00:22	*1.5*	18.6
600 Unpaid community services and help to other households (relatives, friends, and neighbours)	00:11	*0.8*	18.9	00:16	*1.1*	22.1	00:05	*0.4*	34.4
700 Education	00:42	*3.0*	18.5	00:42	*2.9*	26.1	00:42	*3.0*	28.5
800 Social and cultural activities	03:01	*12.6*	5.1	02:56	*12.3*	6.4	03:07	*13.0*	8.7
900 Mass media use activities	02:32	*10.6*	5.4	02:28	*10.3*	7.3	02:37	*10.9*	8.2
000 Personal care activities	10:46	*44.9*	2.6	10:47	*45.0*	4.7	10:43	*44.7*	5.3

Source: Own calculations based on BA TUS 2005.

Table 2 Time Totals Considering Simultaneity. Activities on an Average Day by Gender

Activities on an Average Day (Monday through Sunday)	Total Population			Women			Men		
	Hours	%	CV Time	Hours	%	CV Time	Hours	%	CV Time
Total	**28:15**	*100.0*	**2.9**	**28:28**	*100*	**4.8**	**28:00**	*100*	**5.2**
100 SNA work	04:07	*14.6*	6.9	02:54	*10.2*	9.1	05:37	*20.1*	9.6
400 Unpaid domestic work for own household	02:31	*9.0*	5.7	03:34	*12.5*	7.0	01:14	*4.4*	11.2
500 Unpaid care for children and/or adults for own household	00:55	*3.3*	10.6	01:16	*4.5*	13.1	00:29	*1.8*	18.8
600 Unpaid community services and help to other households (relatives, friends, and neighbours)	00:15	*0.9*	18.9	00:21	*1.2*	21.6	00:08	*0.5*	32.9
700 Education	00:45	*2.7*	19.1	00:47	*2.8*	27.1	00:44	*2.7*	28.8
800 Social and cultural activities	04:20	*15.3*	5.2	04:16	*15.0*	6.2	04:23	*15.7*	8.4
900 Mass media use activities	03:29	*12.3*	6.0	03:26	*12.1*	8.0	03:33	*12.7*	7.8
000 Personal care activities	11:50	*41.9*	2.6	11:51	*41.6*	4.6	11:48	*42.2*	5.2

Source: Own calculations based on BA TUS 2005.

A comparison of population averages[32] further illustrates this point. As it is clear from Tables 1 and 2, the least simultaneously performed activities (SNA work, personal care activities and education) are the ones that lose the most in terms of the proportion of average time devoted to them when time considering simultaneity is computed. Major gains in terms of population average time are recorded in those activities that are most extended in the population (i.e., that record very high participation rates, as it will be

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[32] Total time divided total population; women's time divided by female population; men's time divided by male population.

explained further on) and present high simultaneity ratios, like social and cultural activities (including socializing) and mass media use.

Not considering simultaneous activities presents obvious gender biases even at this very aggregate level. Women devote 7:03 hours in simple terms and 8:06 hours in adjusted terms to productive activities, i.e., SNA work and unpaid care work (including unpaid domestic work, unpaid care for children and/or adults for own household and unpaid community services)[33]; while men devote 6:48 hours in simple terms and 7:30 hours in adjusted terms. As women engage in simultaneous activities half an hour more than men, the gender gap between productive and non-productive activities (all the rest) increases when simultaneous activities are fully taken into consideration.

Noticeably, gender-based differences powerfully emerge *within* productive activities. Women and men distribute their work burdens in highly dissimilar ways. While the average time used for domestic work, care for children and adults for own household and community services by women triples that used by men both in simple and adjusted terms, time devoted by men to SNA work roughly doubles that used by women.

Unpaid care for children and/or adults for own household takes up 1:16 hours among women and 0:29 hours among men in adjusted terms. Community services are the less frequently performed activities by the population (only 0:15 hours on average in adjusted terms), which reflects the extremely low participation rate recorded in these activities (see below).

4.b Time use estimates and their statistical significance

Given sample sizes, recorded time presents higher coefficients of variation the less time a given activity takes up *vis a vis* the size of the subpopulation being analyzed. Therefore, aggregate information presents relatively lower CVs (i.e., total population average times). CVs indicate when significant (and non-significant) disaggregation can be performed and the increase in sample sizes required if greater detail is eventually sought in future TUS in Buenos Aires City[34].

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[33] I am following the UNIFEM (2005:24) definition, which is the equivalent of non-SNA work. Unpaid care work is "*unpaid* meaning that the person doing the activity does not receive a wage for it; [is] *care* meaning that the activity serves people and their well-being; [and is] *work* meaning that the activity has a cost in terms of time and energy and arises out of social or contractual obligation, such as marriage or less formal societal relationships.

[34] CVs are calculated both for time estimates and for the estimate of the number of persons engaging in a given activity.

This is the 'bottom-up approach' in time use data collection and analysis, in the sense that the degree of significant activity aggregation is determined *ex post* by activity frequency[35]. The highest CVs in Tables 1 and 2 correspond to unpaid community services, which are the least frequent activities and the ones in which participants engage in during the shortest average time. As Table 3 shows, 11% of women but only 5% of men engage in unpaid community services and help to other households. As in all unpaid care working time activities, women participate more *and* the time female participants devote to these activities is higher then men. This difference peaks in unpaid domestic work for own household (400), in which over 90% of women participate (as opposed to 65% men) and time devoted by women doubles that by men.

Only 35% of women between 15 and 74 years of age engage in SNA work, as opposed to 58% of men, though differences in average hours among men and women engaging in paid work are not that important (1:30 hours considering simultaneity)[36]. Indeed, those who are working for pay do have very long working days, irrespective of their gender[37].

Social and cultural activities present very high participation rates (and simultaneity) and quite high times by participant because this category includes socializing. This is the result of spontaneous accounts of respondents activities but also of fieldworkers trained to translate into 'socializing' respondent's recalls of being 'with' others (family, friends)[38]. Given this approach, the difference between weekdays and weekend days' participation rates in these activities is not as strong as expected[39].

The same pattern is evident in mass media use activities, though in this case is the possibility of recalling up to three non-hierarchical activities that 'made room' for reports on listening to the radio and watching TV *while* doing other things (1 hour out of the 3:54 hours devoted on average by participants).

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[35] As opposed to tasks lists, in which the degree of disaggregation is *ex ante* determined by the detail and length of the activity list.

[36] These participation rates are lower than the average employed population between 15 and 74 years of age (55% among women, 76% among men), since in any average day, some employed persons may not engage in SNA work (weekends, holidays, leaves, etc.).

[37] It should be noted that according to the Activity Classification System, traveling time is added to the activity originating the need for transportation. Therefore, SNA work includes time to get to and come back from paid work.

[38] Identifying the difference between 'socializing with family' and 'child care' posed a challenge to fieldworkers, according to children's ages and who else was present. Typically, a dinner at home with family and young children could involve both.

[39] 88.3% of total population engages in social and cultural activities during weekdays and 91.1% do so during weekends.

Table 3 Participation Rates and Time by Participant on an Average Day according to Gender

Activities on an Average Day (Monday through Sunday)	Total Population				Women				Men			
	Hours by Participant		*Part. rate*	CV Pers.	Hours by Participant		*Part. rate*	CV Pers	Hours by Participant		*Part. rate*	CV Pers
	Simple	With Simul_tan_eity			Simple	With Simul_tan_eity			Simple	With Simul_tan_eity		
Total	**24:00**	**28:15**	*100.0*	**2.7**	**24:00**	**28:29**	*100.0*	**4.7**	**24:00**	**28:00**	*100.0*	**5.3**
100 SNA work	08:26	09:00	*45.9*	5.4	07:43	08:09	*35.7*	8.5	08:59	09:39	*58.3*	8.4
400 Unpaid domestic work for own household	02:42	03:08	*80.6*	3.8	03:18	03:51	*92.6*	5.5	01:40	01:53	*65.8*	6.7
500 Unpaid care for children and/or adults for own household	02:42	03:34	*25.9*	8.6	03:07	04:07	*30.9*	10.7	01:52	02:30	*19.6*	14.2
600 Unpaid community services and help to other households (relatives, friends, and neighbours)	02:16	03:02	*8.4*	14.8	02:29	03:13	*10.9*	16.0	01:43	02:33	*5.2*	29.8
700 Education	05:06	05:31	*13.9*	12.9	05:01	05:34	*14.1*	16.9	05:11	05:27	*13.6*	22.7
800 Social and cultural activities	03:20	04:47	*90.4*	2.9	03:13	04:41	*91.4*	5.2	03:30	04:55	*89.3*	5.9
900 Mass media use activities	02:51	03:54	*89.1*	3.1	02:45	03:49	*90.0*	5.1	02:58	04:02	*88.1*	5.8
000 Personal care activities	10:46	11:50	*100.0*	2.7	10:47	11:51	*100.0*	4.7	10:43	11:48	*100.0*	5.3

Source: Own calculations based on BA TUS 2005.

4.c Daily rhythms

The 24-hour recall activity diary allows for the analysis of daily rhythms in time use, a rich time use dimension that adds to activity duration analysis and is absent from tasks list surveys.

Graphs 1, 2, 3 and 4 show average adjusted time[40] for employed men, employed women, not-employed men (either unemployed or inactive) and not-employed women (either unemployed or inactive).

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[40] I.e., total time divided total subpopulation under analysis –as in section 4.a.

Graph 1
Employed Men. Average Adjusted Time during the Hours of an Average Day according to One-Digit Activity Categories. Buenos Aires City, 2005.
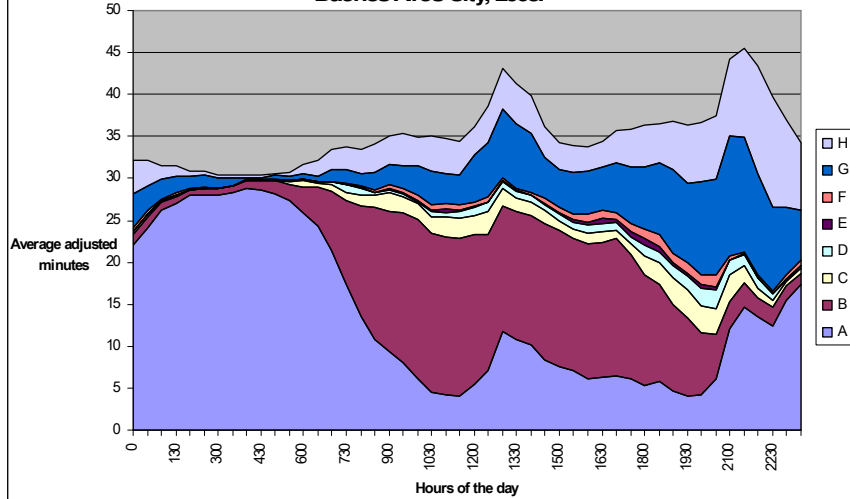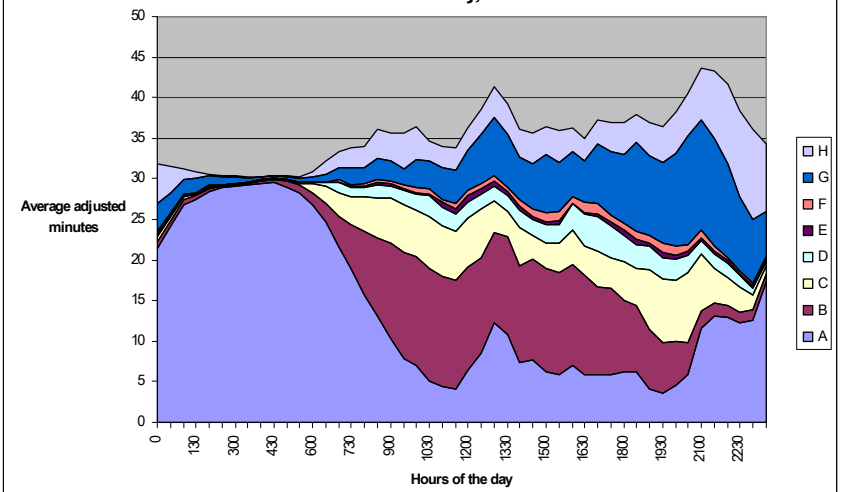
Graph 2
Employed Women. Average Adjusted Time during the Hours of an Average Day according to One-Digit Activity Categories. Buenos Aires City, 2005.

Graph 3
Not-employed Men. Average Adjusted Time during the Hours of an Average Day according to One-Digit Activity Categories. Buenos Aires City, 2005.
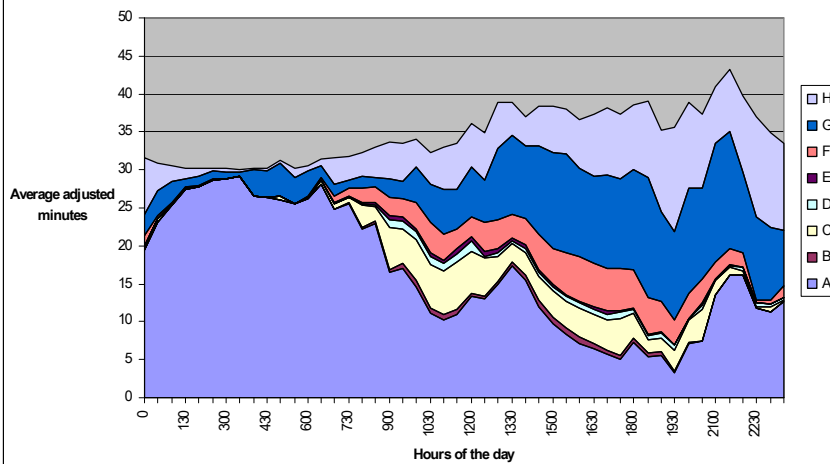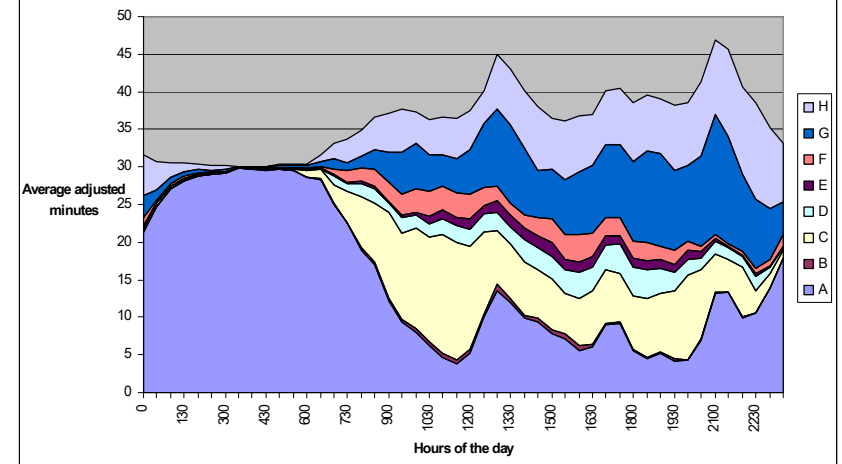
Graph 4
Not-employed Women. Average Adjusted Time during the Hours of an Average Day according to One-Digit Activity Categories. Buenos Aires City, 2005.

Key

A - Personal care activities

B - SNA work

C - Unpaid domestic work for own household

D - Unpaid care for children and/or adults for own household

E - Unpaid community services and help to other households (relatives, friends, and neighbors)

F - Education

G - Social and cultural activities

H - Mass media use activities

Note: the structure of total BA TUS population is as follows: 34% are employed men, 30% are employed women; 11% are not-employed men and 25% are not-employed women.

Source: Own calculations based on BA TUS 2005.

At every half hour, times exceeding 30 minutes reflect simultaneously performed activities. The least simultaneous activities (personal care) explain the 'shorter' half hours at the beginning of the days. For all subgroups, peaks in simultaneity arise at lunch and dinner time, though they are less marked among not-employed men[41].

Also, women engage more regularly in simultaneous activities than men, so their total time frontier is higher than 35 minutes for almost all half hours from 9am onwards.

Personal care daily rhythms coincide on average among employed women and men, as does the productive frontier (paid plus unpaid care work) for most of the daylight hours – though women's productive time increases from 7pm onwards. Graphs also show very clearly how this productive work is distributed along gender lines even among those employed. During all daylight hours, an important fraction of employed women's time is devoted to domestic work and care for children and/or adults for own household, while on average employed men devote to these activities less than half of employed women's time. Leisure time also has a slightly different composition, with employed women devoting relatively more time to social and cultural activities and employed men to mass media use at evening and night hours. Education is not marginal along the day – particularly during evenings– neither for employed men nor for employed women, a pattern that shows that students (particularly tertiary and university) also consistently engage in SNA work[42].

These patterns present a striking contrast to not-employed men and women[43], who during the day devote more time to domestic work than their employed same-gender

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[41] Not employed men account for 11% of total population, 2PP are unemployed men and 9PP are inactive men. Not much of this time use pattern should therefore been accrued to 'forced idleness'.

[42] Indeed, 46% of those who engaged in educational activities were employed.

[43] Out of the 25% of total population not-employed women account for, 3PP are unemployed women and 22PP are inactive women.

counterparts. Interestingly, not-employed men engage in simultaneous activities more often during afternoons and evening time, while not-employed women do so more consistently along the day. Generally speaking, not-employed men are in education and not-employed women are either in education or housewives, which is evident by the amount of domestic working time and child and adult care time they engage in.

Interestingly, it is more the time pattern of child and adult care than its amount that differs between employed and not-employed women: employed women care for children and adults increasingly over the course of the day with a peak at 11am, and then descending during the afternoon to reach another peak at 5pm, showing a pattern of care that has to be reconciled with paid work; on the contrary, not-employed women increase their child and adult care activity as hours pass –particularly during the afternoon– to reach a peak at 6pm. It should also be noticed that it is among the not-employed women that unpaid community services and help to other households become significant.

4.d The role of probing questions

Probing questions on child and adult care wording resulted from the pilot test and aimed at collecting underreported child and adult care time while avoiding affirmative answers from professional paid carers (*11. Did you take care of children at any time during the day/at night hours? –exclude paid work. Yes, but I did not mention it at all times –go back to questionnaire and fill the activity in; Yes, I have already mentioned it; No, I haven't. 12. Did you take care of seniors/sick adults at any time during the day/at night hours? –exclude paid work. Yes, but I did not mention it at all times –go back to questionnaire and fill the activity in; Yes, I have already mentioned it; No, I haven't.*).

These probing questions worked well, particularly in the case of childcare: 24% of all persons that reported child care for either their household or other household's kids did so partly because of this probing question and 8% did so because they were prompted to do so –i.e., they had not recalled having taken care of children altogether before being asked about it explicitly. This recalling effect was particularly important among men: 12% of men who reported childcare did so because of the probing question, since they hadn't recalled caring for children at all before.

As expected –since one tends to forget short events more frequently than long ones– average underreported time with simultaneity was 1:53 hours by participant, substantially shorter than that spontaneously recalled (3:34 hours). Care of seniors/sick adults presented a very low frequency in total population (only 60,000 weighted cases), 15% of them resulting from the probing question.

Table 4 Participation Rates and Time Considering Simultaneity Used for Caring for Own Household's Children and Other Households' Children, by Gender

	Total			Women			Men		
	Particip. in the Population	Particip ant Distrib. (**)	Time considering simultaneity	Particip. in the Population	Participant Distrib. (**)	Time considering simultaneity	Particip. in the Population	Participant Distrib. (**)	Time considering simultaneity
People Providing Child Care for own household (500) or other households' (600) children	**27%**	**100%**	**03:43**	**33%**	**100%**	**04:13**	**20%**	**100%**	**02:42**
People who provided child care, (spontaneously recalled) (*)	25%	92%	03:34	31%	93%	04:02	18%	88%	02:33
People who provided child care (recalled when asked a second time)	7%	24%	01:53	8%	23%	01:55	5%	25%	01:48

Source: Own calculations based on BA TUS 2005. (*) Includes activity codes that do not discriminate between spontaneously recalled and recalled when asked the probing question (traveling time, other activities). (**) Notice that respondents could have recalled some time spontaneously and more time as a result of the probing question. Therefore, these columns needn't add to 100%.

The third probing question (*13. Have you received any payment for any of the abovementioned activities?*) aimed at identifying activities that were SNA work, even if the respondent would not consider them as such[44]. Notice that the question was not on whether there was the respondent did any 'paid work' that forgot to recall but rather whether there was any payment involved: respondents needn't differentiate between what they understood as proper 'paid work' and the activities they engaged on for a payment… which nevertheless counted as paid work according to the Activity Classification System adopted.

Very few respondents (0.6% of all who engaged in SNA work) answered affirmatively to this question. Interestingly, 90% of them were women. The average time (considering simultaneity) devoted to these activities by those who engaged in them was 0:28 hours a day. Clearly, this probing question amounted to only a marginal addition to the measurement of total SNA work.

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[44] Typically, respondents differentiate what they consider 'proper' (paid) work from very informal/ irregular alternatives which nevertheless generate an income. However, the Buenos Aires TUS shows this phenomenon to be marginal.

The main lesson to be derived from the Buenos Aires Time Use Survey is that an unprejudiced yet meticulous approach to time use collection in second- (or third or more!) best scenarios has proven fruitful. Abandoning the idealized, stand-alone, Eurostat-type time use data collection approach was a good first step. Carefully thinking about trade-offs and documenting compromises made all along also helped to frame data analysis and recognize its strengths and limits.

As mentioned, designing a module to be attached to an ongoing household survey implied accepting all core survey characteristics as givens. Among the many limits this imposed on the Buenos Aires TUS worth mentioning are the lack of seasonality measuring (since the Buenos Aires Annual Household Survey is collected only once a year); the impediments to probing labor force participation due to differences in reference periods; and the unfeasibility of surveying all household members due to extensive interview times. I believe, however, that only the latter is relevant, since it made the individual, and not the household, the unit of analysis. This feature constrains distributive analysis within households and investigating on the role of paid domestic labor in households from different income strata. It is worth noting that most TUS share this constraint with the Buenos Aires TUS.

Yet, the Buenos Aires AHS design catered well for a 24-hour recall activity diary. It had a good identification of household members and their ages, which was important to rapidly single out target population and correctly select at random one respondent for the time use module. It had already allowed for a revisit, so interviewers were used to reach the household more than once. It had a well organized questionnaire reception and supervision, which allowed for correcting errors and solving fieldwork problems as they arose. The extra resources needed to complete the Buenos Aires TUS after fieldwork had finished –edition, data entry, weights calculation and data processing– were also made available by the Directorate-General of Statistics and Censuses of the City Government.

I mentioned before that the unit of analysis is really the only drawback of the Buenos Aires TUS design that stems from the fact that it was attached to the AHS. Other limitations of scope directly result from conscious decisions taken at design stages, based on the belief that there is no 'one-fits-all' objectives time use survey. This is particularly the case with respect to some difficult issues, like child labor. Only if children respond themselves freely to time use questionnaires –with no interference from parents, either explicit or implicit– could a survey like this be used to identify accurately different forms of child labor. However, this could not be guaranteed even in the context

of highly literate, relatively middle class Buenos Aires population, and including measuring child labor one as one of the TUS objectives was dismissed from the outset[45].

A future round of the Buenos Aires Time Use Survey should include collective households and shanty-towns' population as a must. Probing questions could possibly be restricted to childcare, given the little incidence of the other two. Additional questions on daily childcare (hours) received by household children up to 5 years of age and of the reception of care services by non living-in paid domestic workers, plus the hours involved, keeping 'yesterday' as a reference in both questions should be added –at least to use them as controls. A larger sample size (i.e., extending the module to more than two tranches and/or selecting more household members) could eventually improve less frequent yet important to measure activities' statistical significance.

The Buenos Aires TUS has also paved the path for future, nation-wide time use data collection as a module of ongoing household surveys, possibly the Continuous Household Survey (*Encuesta Permanente de Hogares* or EPH by its Spanish acronym) collected by INDEC, the National Statistical Institute. EPH shares many characteristics with the Buenos Aires AHS and has the advantage that it is collected in all major Argentine urban areas. Advocacy, planning, funding and further collaboration among statistical offices are all required for time use data collection at a national level to become a reality in the Argentinean context. Using Buenos Aires TUS data to inform gender-aware policy analysis will build on this direction.

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[45] By that time, a specific survey on child labor, funded by UNICEF, the ILO Buenos Aires Office and the Ministry of Labor had just been collected (OIT, 2006).

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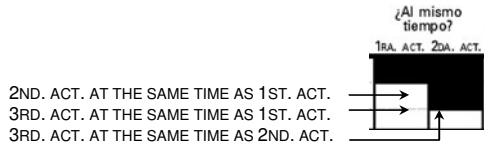
ANNEX

Time Assignation Chart

The Diary Form included an adaptation of the South African 2000 TUS to capture simultaneity. If there were two activities in a time slot, a question was asked on whether

the second activity was performed at the same time of the first *"Did you do (the second activity) at the same time as (the first activity)?"* If there were three activities in a time slot, two other questions were asked: *"Did you do (the third activity) at the same time as (the first activity)?"* and *"Did you do (the third activity) at the same time as (the second activity)?"* Following AHS coding, '1' meant yes and '2' meant no.

When activities were not simultaneous they were consecutive. In case activities are consecutive, both simple time and time considering simultaneity coincided.

¿Al mismo tiempo?
1RA. ACT.   2DA. ACT.

2ND. ACT. AT THE SAME TIME AS 1ST. ACT.
3RD. ACT. AT THE SAME TIME AS 1ST. ACT.
3RD. ACT. AT THE SAME TIME AS 2ND. ACT.

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			30	30

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			15	30
Activity 2	1		15	30

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			10	30
Activity 2	1		10	30
Activity 3	1	1	10	30

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			10	30
Activity 2	1		10	15
Activity 3	1	2	10	15

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			10	15
Activity 2	1		10	30
Activity 3	2	1	10	15

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			10	20
Activity 2	1		10	20
Activity 3	2	2	10	10

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			15	15
Activity 2	2		15	15

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			10	15
Activity 2	2		10	15
Activity 3	1	1	10	30

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			10	20
Activity 2	2		10	10
Activity 3	1	2	10	20

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			10	10
Activity 2	2		10	20
Activity 3	2	1	10	20

Combinations	First Activity	Second Activity	Simple time	Time considering simultaneity
Activity 1			10	10
Activity 2	2		10	10
Activity 3	2	2	10	10

Activity Diary (pages 1 and 4)

estadística de la Ciudad

Form. D

gobBsAs

SECRETARÍA DE HACIENDA Y FINANZAS

Dirección General de Estadística y Censos

CGP ☐☐☐☐   Replica ☐   UP _____   Encuesta ☐☐☐   Hogar n° ☐

Calle _____   Nro. _____   Piso ____   Dto. ____   Hab. ____   Torre ____

Observaciones...

Nombre de la persona entrevistada: ....   Número de miembro: ...

Fecha del día para el cual se registran las actividades (el día de ayer)

Día	Mes	Año	Día de la Semana

DIARIO DE ACTIVIDADES

Tiempo de duración	Descripción de las actividades	Código	¿Al mismo tiempo? 1RA. ACT. 2DA. ACT.	¿Dónde?
4.00 a 4.30				
4.30 a 5.00				
5.00 a 5.30				
5.30 a 6.00				
6.00 a 6.30				
6.30 a 7.00				
7.00 a 7.30				
7.30 a 8.00				
8.00 a 8.30				
8.30 a 9.00				
9.00 a 9.30				
9.30 a 10.00				
10.00 a 10.30				
10.30 a 11.00				

Código de localización: 1 Vivienda propia • 2 La vivienda de otro • 3 Su lugar de trabajo (establecimiento; oficina; vendedor ambulante; taxi; etc.) • 4 Establecimiento educativo • 5 Establecimiento de salud • 6 Otros lugares (un club; un parque; un cine; un supermercado; un shopping; la calle; etc.) • 7 Trayectos (en medios de transporte o caminando)

11. **¿Cuidó a los niños en algún momento del día/ durante la noche?**

(a excepción de las tareas remuneradas)

1 - Sí, aunque no lo mencioné todas las veces *(si es así, vuelva al cuestionario y llene la actividad).*

2 - Sí, ya lo mencioné todas las veces. ⎤

3 - No. ⎦ → *A preg. 12*

12. **¿Cuidó adultos mayores o enfermos en algún momento del día/ durante la noche?**

(a excepción de las tareas remuneradas)

1 - Sí, aunque no lo mencioné todas las veces *(si es así, vuelva al cuestionario y llene la actividad).*

2 - Sí, ya lo mencioné todas las veces. ⎤

3 - No. ⎦ → *A preg. 13*

13. **¿Recibió algún pago por algunas de las actividades que realizó?**

1 - Sí, aunque no lo mencioné todas las veces *(si es así, vuelva al cuestionario y llene la actividad).*

2 - Sí, ya lo mencioné todas las veces ⎤

3 - No ⎦ → *A preg. 14*

Nota al encuestador: Esta pregunta tiene el objetivo de contribuir a la codificación. Ciertas actividades pueden no ser consideradas "trabajo remunerado" aún cuando se reciba un pago, así como ciertos trabajos asalariados no son remunerados (familiares, meritorios en la justicia, etc.).

14. **¿Ayer fue un día de la semana/del fin de semana típico para usted?**

1 - Sí

2 - No, porque estaba enfermo

3 - No, porque era un día de vacaciones en el establecimiento educativo al que asisto

4 - No, porque estaba de licencia en mi trabajo

5 - No, porque ese día estaba en un casamiento/funeral/bautismo/cumpleaños/etc.

6 - No, porque me dediqué a cuidar a otro miembro de la familia

7 - No, porque (describa) ....

....

15. **Por último, ¿puede confirmarme que durmió ayer entre las 4 de la mañana de ayer y las... (hora en que se levantó) y las .....(hora en que se acostó) y las 4 de la mañana de hoy?**

1 - Sí.

2 - No (*si es así, vuelva al cuestionario y llene la actividad*).

Fecha de realización de la entrevista...

Tipo de entrevista

Personal	Telefónica	Parte personal
unicamente 1	unicamente 2	y parte telefónica 3

Tiempo de duración de la entrevista......... minutos