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Automating universal credit: A case of temporal governance

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Abstract

In this paper we study the dimension of time in social security, namely, the requirement of claimants to adopt a particular temporality in return for entitlements. We focus on the temporal rules and mandates of Universal Credit (UC), a unified benefit in the United Kingdom that delivers payment to claimants through a dynamic, automated means-testing system. UC imposes temporality through a monthly assessment period, a unit of time that UC has made infrastructural through an automated payment system. From our empirical study, we offer two sets of examples of how UC's particular temporality shapes claimant experience of the benefit. In these cases, the monthly assessment period conflicts with other temporalities that claimants must contend with — those set by employers through their employer payment cycle, in one, and the timeframes dictated by childcare providers and the practical needs of people with young children in the other. In both cases, a temporal mismatch leads to a loss of entitlement, a phenomenon we call temporal punitiveness.

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1. Introduction

In this paper we study the dimension of time in social security by looking at the requirement of claimants to adopt a particular temporality imposed by an automated system in return for entitlements. We focus on the temporal rules and mandates of Universal Credit (UC), a unified benefit in the United Kingdom that delivers payment to claimants through a dynamic, automated means-testing system. We illustrate how people may experience this system's particular temporality by drawing on the accounts of claimants receiving UC over a year's period in 2022–2023.

We begin our paper by introducing a framework for understanding various theories of time and welfare, drawing on literature around time and power, temporal politics and time's embedding in digital infrastructures. We argue that the concept of an imposed temporality has largely been neglected in literature on welfare, which focuses more on waiting and time-consuming but obligated tasks. We then introduce Universal Credit as an information infrastructure comprised of an online account and dynamic payment system that imposes temporality through a monthly assessment period. We argue that UC is based on highly political temporal assumptions that result in a particular temporal normativity. We describe our qualitative empirical study and illustrative cases from this research to demonstrate how UC enacts temporal governance through automated timeframes and deadlines and how this inflexible temporality may lead to severe consequences, ranging from the loss of entitlement to stress and anxiety and negative impacts on family members. When claimants must adhere to other temporalities that conflict with that of UC's, they can see the reduction of their benefits — an effect we call temporal punitiveness.

In the next section we introduce literature on time, power and welfare that helps us understand UC's unique temporality.

2. Time and power

The finite and scarce nature of time applies equally to everyone — we are all subjected to this "inherently egalitarian" limitation [1]. Time is also, for most, a valued "basic asset" (Standing, 2013) — and some have more power and control over this asset than others. Contributors to the sociology of time have long studied how social and political structures have the power to shape our individual and collective temporal experiences, as when governments enforce national time systems or employers define 'time well spent' versus idle time (Standing, 2013). So, while the limitations set by the nature of time may be equal for all, the freedom to decide what to do with our time is not. Those who possess wealth and social standing have more discretionary time to spend as they wish (Goodin, *et al.*, 2008; Standing, 2013; Rice, *et al.*, 2006), just as men, in many parts of the world, have more control over their time than women (Wajcman, 2015). Power not only enables a person to decide how they spend their own time but also makes it possible to influence how others — usually those less powerful — make use of theirs. Researchers have found this power differential between certain generations, when one cohort has the control to shape both past and future ones (Thompson, 2013). Literature on workforce management describes how close supervision and detailed breakdowns of work processes manage and structure workers' time (Brown, *et al.*, 2010; Günsel and Yamen, 2020). And in the last several decades, hyper-Taylorist digital tools (Andersson, *et al.*, 2021) use real-time information systems to track workers from the other side of the world (Brown, *et al.*, 2010).

In this paper we focus on the specific temporal relations between citizens and state as mediated through social security systems. A monopolization of a basic service, the state has enormous power to dictate the temporal conditions necessary for a person to receive a welfare benefit. In this imbalanced power structure, claimants have neither other sources nor means to acquire what they receive as entitlements [2]. Beyond explicit, codified policy decisions, the design of a welfare system — its bureaucratic procedures, organizational capacity and technical infrastructures — will also determine, to a more or less intentional degree, how these relations play out (Peeters, 2020). Close analysis of these bureaucratic and technical systems can excavate subtle political choices that shape claimants' time and inform citizen-state relations.

To date, the literature on this temporal dynamic in social security has focused on the role of time in two main areas: waiting and requiring time-consuming duties for conditional benefits. We look at both areas in turn before introducing a third: the imposition of a temporality on claimants.

2.1. Welfare, waiting and occupied time

Requiring citizens to wait for a service is an assertion of state power, especially when they do not have resources or alternative options (Schwartz, 1974). Scholars of welfare systems have noted this dynamic by documenting experiences of waiting. In the long-term, claimants may wait for decision letters or delivery of services over a vexing, uncertain period (Reid, 2013; Seefeldt, 2017). In her account of the aftershocks of Hurricane Katrina in New Orleans, Reid (2013) describes the 'temporal domination' imposed on people waiting for a decision about benefits, particularly families who did not conform to middle-class values (Reid, 2013). FEMA assistance — the main benefit in the U.S. for victims of natural disaster — assumed a certain middle-class claimant, a nuclear household with safety nets, whose application was processed faster, while households that did not fit this ideal, such as those headed by single mothers, were made to wait. Seefeldt (2017) describes female welfare recipients in Michigan in the U.S. who actively monitor progression of their cases and assert some agency in their dealings with bureaucracy, illustrating how people do not stay purely inactive and docile while they wait.

Researchers also investigate waiting in the short term, in the form of physical queues at welfare offices or phone calls placed to government agencies (Goodsell, 1984; Auyero, 2011; Molotch, 2016). Observing the role of front-line bureaucrats in two French welfare offices, Dubois (2010) notes the imbalanced power structure at play when claimants walk into an office with what they feel is urgent business, while staff treat that business as routine, rote procedure. Observing a welfare office in Buenos Aires, Auyero (2011) describes the space's physical chaos as people spend hours in lines, not knowing how long they will stay or if they will receive any support. People (mostly women) are helpless as they wait, as the state attempts to make “a docile body of welfare clients” [3].

The second area of study into the temporal dimensions of welfare focuses on the imposition of time-consuming duties required to receive a benefit. Whelan (2020) calls this phenomenon of administrative labor shifted to the claimant ‘occupied time.’ Through a study of the recovery of past welfare overpayments in Australia, Whelan (2020) notes that the system required administrative labor that made recipients responsible for submitting relevant documentation in a very tight timeframe in order to prove they were not in debt to the state. The paperwork took significant time that could have been used in some other productive way, as claimants were asked to become experts at their own paperwork for accessing an entitlement. Others, too, have written about how traditional and digitalized welfare create additional administrative burdens and time commitments for recipients (Peeters and Campos, 2021; Yates, *et al.*, 2022; Griffiths, 2021; Bielefeld, 2021; Madsen and Mikkelsen, 2022; Madsen, *et al.*, 2022). Time costs can occur if a system saddles claimants with the job of correcting errors, gathering paperwork or taking pains to learn a system in order to comply with its demands. Bielefeld (2021), who studied the Australian social security system’s Cashless Debit Card, noted the painstaking time that recipients took to manage technical failures that could occur with digital systems.

In both instances — waiting and the occupied time needed to comply with a benefit — the state asserts temporal control over people requiring assistance. As Reid (2013) argued in her study of Katrina victims, such forms of temporal domination uphold a neoliberal approach to welfare because they make seeking assistance a barrier to entitlements, exacerbating social inequality in the process.

2.2. Imposed temporalities

In our study of Universal Credit, we identify a third type of temporal control not previously accounted for in this literature on time and social security systems. This third type takes the form of imposing a unit of time upon the claimant over the duration the benefit is received. Whelan (2020) conceptualized one-off tight deadlines within the social security system as part of the punitive welfare agenda where “time is used *against* the client” [4]. In the quite distinctive case of UC, the imposition is not a deadline but a new unit to measure time. Here time is made infrastructural, imposed upon claimants in the form of an automated monthly assessment period, which we explain in detail in the next section.

Imposed temporalities arise from our need to measure the passing of time. Some units of measurement originate in nature — for instance, the length of a day is roughly aligned with the duration of Earth rotating on its axis once. Other units, however, are not tied to nature or logic, such as the artificiality of weeks, a modern construction (Henkin, 2021). Some of the most basic units of measuring time in modern societies, namely months and weeks, do not align (except occasionally in the month of February) nor do years and weeks.

We understand UC as a form of institutionally imposed time, like the enforced substitution of local conceptions of time with a general, state-level standardized temporality of the calendar year (Standing, 2013), or to the clock that structures, quantifies and squeezes value from workers’ time. Institutional time is always one among others — Sharma (2014) argued that we contend with multiple temporalities at once, depending on the institutions and people we are beholden to. We also have an embodied experience of time that we must align with other durations, such as an employer’s calendar. Sharma describes the “temporal normativity” of the nine-to-five workday that not only structures most workers’ weeks, but also others’, who nonetheless experience the morning rush of commuters or prime time television in the evening, programmed around the typical working day [5]. Foster, writing about temporalities of punishment, demonstrated how time spent in prison and the temporal requirements of the prison system affected both offenders and their families (Foster, 2019). McNeill and co-authors (2022) described the de-synchrony people in prison experience between time inside and outside prison.

Our experience of temporalities coevolves with digital infrastructures. Wajcman and Dodd [6] noted that “modern patterns of time can scarcely be understood without the use of technology,” such as ubiquitous digital calendars (Wajcman, 2019). Traditional temporalities, which — as argued — sometimes clash, are now also overlayed by dynamic, fluid and hyper-personal experiences of time. The domestication of digital infrastructures into people’s everyday work and personal lives change conceptions of our availability by blurring the boundaries between work and leisure (Jarrahi, *et al.*, 2021). These tools also allow for an on-demand, personalized experience of time and timeframes, as when we order online deliveries to arrive at selected timeslots. Studies in digital labor have looked at the more granular temporalities imposed by commercial platforms that monitor and control workers’ time within the on-demand gig economy (Chen and Sun, 2020; Gregory, 2021).

In this paper, we examine another institutionally imposed temporality — a monthly assessment period — by Universal Credit’s automated payment system. We offer two examples of how this temporality shapes claimants’ experience of the benefit. In both, the monthly assessment period conflicts with other temporalities that claimants must contend with, those set by employers through the employer payment cycle and those dictated by childcare providers and the practical needs of people with young children. In both cases a temporal mismatch leads to a loss of entitlement.

In the next section, we describe Universal Credit as a digital infrastructure, and the monthly assessment period as a unit of time that UC has made infrastructural through an automated payment system. Following this, we describe our study and methods, then present the two examples of the temporality that UC claimants experience.

3. Universal Credit

3.1. UC's dynamic payment

Universal Credit is a means-tested benefit introduced in 2012 in the U.K. that replaced a set of previously existing benefits, including Child Tax Credit, Housing Benefit and Income Support [7]. The roll-out has occurred in phases and is set to be finished in 2024, by which time all households previously receiving tax credits and any other legacy benefits should be moved to UC [8]. UC is digital-by-design, which means that recipients apply and interact with case managers and other staff using an online account. The online account features the breakdown of claimants' monthly payment; a journal, which claimants use to communicate with staff from the Department for Work and Pensions (DWP); and a To-Do List of actions claimants must take to continue receiving the benefit. People who are not able to make their claim online can opt for a phone claim instead. UC is a conditional benefit: claimants are placed in different categories based on their capability to work and certain life circumstances, such as having a young child to take care of. As a result, some claimants are required to work or look for work for a certain number of hours per week to qualify for receiving UC.

In policy and welfare studies, researchers have primarily focused their analysis of Universal Credit on the laws, policies and bureaucratic systems comprising the benefit, such as job centres — not on UC as a digital infrastructure (for exceptions see Griffiths, 2021 and De Oliveira, 2022). We conceptualize UC as an infrastructure by drawing on Plantin, *et al.'s* (2016) description of infrastructural properties, which entail interconnected systems often comprising essential and widely accessible services regulated in the public interest (Plantin, *et al.'s* [9]. The UC Web site and claimants' digital accounts, for instance, are part of a distributed digital system interoperable with other government Web sites as part of the expansive network of the UK.gov domain, along with systems run by other government agencies at local and national levels through data sharing, not to mention hundreds of DWP Job Centres throughout the U.K. that use the platform to communicate to claimants. Developing UC in-house has also contributed to DWP's increase of technical staff in offices across the U.K., including those at the DWP's Intelligent Automation Garage [10], which incorporates automation and machine learning into UC to handle claims or process budgeting advance applications [11].

Literature on the digital infrastructures of social services frequently questions how well administrators consider inclusivity and diversity in their designs (Palacio Ludeña, 2021; Bhaia and Bhabha, 2017). Such concerns apply with UC, as its digital infrastructure mediates the relationship between claimant and the state, and claimants' digital UC account is their essential gateway to the public benefit and primary point of contact with DWP employees. However, this paper is not focused on user access but rather on how UC embeds values experienced by claimants already interacting with it (Star and Ruhleder, 1996; Ribes and Bowker, 2008). UC enacts a politically motivated temporality through its automated payment system: it makes a particular normative understanding of time infrastructural.

UC's automated payment is a key feature of the system. User experience designer Richard Pope, who worked on early iterations of UC, calls UC a 'hyper-means-tested' benefit [12] because the system recalculates the amount of money claimants receive every month based on individual data points collected during the prior monthly assessment period. Claimants receive a 'minimum standard allowance' [13] — a single person who is under the age of 25 currently has the standard allowance of £265.31 — and this is increased if the person has a disability or young children. Payments will also fluctuate depending on the claimant's monthly income (or the household income if it is a couple with a joint account) and deductions. Deductions include repayments for advance claims the claimant may have been granted in the past, past overpayments and third-party deductions made at the request of a creditor, including rent arrears, utility arrears, Council tax bill arrears, child support maintenance and fines by UC.

The UC payment system applies its temporality automatically through a monthly assessment period, which determines each monthly pay amount. To understand how UC imposes its temporality, we need to investigate the assessment period.

3.2. UC's monthly assessment period and normative temporality

The monthly assessment period is an individualized, fixed unit of time based on the day a person applied for the benefit — for instance, if a person applies on

January 5th, their assessment period going forward will be from the 5th of a given month until the 4th of the next month. For those who work, UC considers all income that is reported to HM Revenue & Customs (HMRC), the U.K.'s tax authority, or self-reported by the claimant to UC during each monthly assessment period. The monthly income of the claimant or household affects both the amount of the monthly UC payment and their eligibility for UC: if a claimant or their partner receive earnings, the payment decreases accordingly (UC applies a 'taper rate': after every £1 they earn, the UC payment goes down by 55p) [14], and if income exceeds a payment threshold for one month's period, a person will not receive UC the following month [15].

These adjustments to UC based on monthly earnings happen automatically through a data exchange with the HMRC's Real Time Information (RTI) system. Employers report their employees' earnings using payroll software to RTI monthly for tax purposes, and DWP accesses this stream of data daily. A report by Human Rights Watch (Toh, 2020) used the metaphor of a camera to describe how RTI affects the UC monthly assessment period:

> If the RTI system is a camera, the assessment period functions like a timer that tells it when to take a photo. The resulting snapshot is the earnings data that Universal Credit's algorithm uses to calculate an individual's benefit payment for that month.

After the monthly assessment of earnings, most claimants in the U.K. receive their payment once a month. In Scotland, people can choose to receive their monthly pay in two, approximately fortnightly installments.

In one way at least, UC's dynamic payment based on the monthly assessment is a significant improvement on the legacy benefit systems. Working Tax Credits based claimants' monthly payment on an average of earnings from a whole year as reported to HMRC. Such calculations could over- or under-estimate the benefit owed over several months or years if a claimants' earnings changed. Claimants were shouldered with reporting changes of earnings, which would not be recalculated for several months. Such discrepancies in reported versus actual earnings lead claimants to go into arrears to DWP if their earnings dipped and rose but their tax credit payment stayed the same [16]. UC's month-to-month calculation, based on actual earnings, greatly eliminates the chances of over- or under-payments to claimants and reduces the burden on claimants to report changes in earnings. Some claimants we spoke to discussed how the dynamic nature of UC pay was an improvement on legacy benefits, which, as one put it to us, "always seemed to be so lagging behind."

However, the dynamic payment also introduces a new degree of uncertainty, as, unlike with legacy benefits, claimants do not always know what amount to expect month to month, making household budgeting harder for some. As one participant put it, "they don't tell you how much you're getting paid until a couple of days before the payment. It's very difficult to manage life because you don't know what Universal Credit are going to do." The complexity of the calculation also means that claimants often do not understand why they are paid a certain amount or why the amount changes as it has.

The monthly assessment period has a powerful shaping effect on claimants, orienting how they budget and spend. In our study, people described how they wait to receive a text message from UC instructing them to log into their digital account to check the amount of their upcoming UC payment. Claimants receive this text message approximately a week before the payment arrives in their bank account, giving them a view of their spending capacity over the next monthly period, as well as affording them a week's window to report if they see any discrepancies in the breakdown of the amount. Fiona, a participant in the study whose story we share in greater detail below, describes this monthly rhythm of interacting with UC based on the assessment period: "I can only see changes on the 29th on every month, when I know how much money I'm going to get or whether they're going to pay the rent now."

The dynamic monthly payment also introduces another difficulty, which is that the application of the monthly assessment period results in reduced entitlements at certain times for certain claimants, a phenomenon we describe in more detail in our findings. Many working claimants must contend with conflicting temporalities: that of UC and that of claimants' employers. As catalogued by civil society organizations, such as the Child Poverty Action Group [17] and Human Rights Watch (Toh, 2020), this discrepancy occurs as the monthly assessment period reflects the amount of earnings a person receives within its time frame, but not the period of work covered by these earnings. As a result, people may receive paychecks covering two different periods of work in the same monthly assessment cycle. The DWP, aware of this discrepancy, calls these dual temporalities "different earning patterns" [18]. We have also found that DWP policy draws on the monthly assessment period to set rules around childcare costs used to deny reimbursement. We go into these two challenges posed by the monthly assessment cycle in more detail in our findings section.

The monthly assessment period is a particular policy choice based on social and political assumptions, reflecting a normative temporality. The monthly unit of time derives from policy justifications set out by UC's designers that those on UC should experience the "world of work". A statement from the DWP's Web site notes, "Universal Credit ... is designed to mirror the world of work and the monthly payments reflect the way many people's wages are paid." [19] This assumption about working norms envisions an ideal claimant who can conform to the temporality of UC's monthly assessment. For most claimants, particularly those paid monthly, UC's temporality will not pose problems, but around 25 percent of claimants, according to DWP's own analysis (Personal Budgeting Support, 2014), will find their benefits reduced, as we explain in more detail below. By automating a particular form of temporality and basing payment amounts around it, UC has made time infrastructural in ways that can reduce entitlement.

In the next section, we go over our study, the methods used and limitations of the research before describing two cases of UC's temporal punitiveness.

4. Study and methodology, limitations of study

The findings that we present in this paper are from a research project started in December 2021 and carried out in Scotland. The project focuses on the automated and digital aspects of Universal Credit through studying the experiences of claimants of UC. The project received ethical approval from the School of Social and Political Science at the University of Edinburgh.

This research is based on data collected by both authors between mid-2022 and early 2023 from 44 participants who were claimants of Universal Credit. We conducted one-off semi-structured interviews with 19 of these respondents, while 25 other participants became part of a qualitative longitudinal panel study after their initial interview. We recruited participants through local charities, distributing the call for participants through online newsletters and physical copies left at the charities and attending in-person events hosted by these charities. Initial interviews lasted for approximately 45 minutes; we conducted them at offices of local charities, cafés, the University of Edinburgh or online. We transcribed and anonymized all interviews; all data is stored on a secure University server compliant with data protection regulations.

Participants qualified for the qualitative longitudinal study if they were working or actively looking for work, as in-work claimants are more likely to experience fluctuation in their monthly payment and confront issues with the automatic payment calculation. Depending on the complexity of their cases, respondents participated in the longitudinal study for either six or twelve months. We interviewed 17 of these participants again at the end of the first six-month period as of the submission of this work, and carried out 16 final interviews at the end of the year period. During the study, we prompted all longitudinal participants by text message every two weeks to provide data on their interactions with Universal Credit, sometimes asking follow-up clarifying questions. The methods of providing data were left up to the participants — some responded with text messages, some conducted phone calls with the researchers and some shared screenshots of their UC account and their interactions with UC staff. This longitudinal engagement with participants proved useful for studying a dynamic digital system, allowing us to capture real-time, varying effects of UC's outputs as participants learned about the system, interacted with UC staff and encountered unexpected difficulties with their payment (Currie and Podoletz, 2023a, 2023b).

Out of the 44 participants, 20 had disabilities, including mental health difficulties, ADHD, dyslexia, dyscalculia and visual impairment. We were able to collect data on self-identified gender from 37 out of the 44 participants. Twenty-seven identify as female, one identifies as non-binary and nine identify as male. When describing our findings, we used pseudonyms to refer to our participants. We shared the depictions of individual cases in the findings with participants for their approval; all gave consent except one, who did not respond with comments.

The findings presented in this paper are limited by several factors. As qualitative, non-representative data, the findings cannot be generalized. We conducted all interviews in English, therefore claimants who did not speak at least conversational-level English were not included in the study. Our sample had a relatively low proportion of respondents who identify as male or non-binary. These limitations should be accounted for when interpreting our findings.

5. Findings: The loss of entitlement due to temporal norms and governance

We present our findings on the temporal norms set by Universal Credit that result in the loss of social security entitlement. The first set of examples illustrate the partial loss of the UC payment accompanied by other negative impacts, while the second is the loss of reimbursable childcare costs. Both examples show how our participants experience UC's temporality. While the findings derive from individual cases, the rules that created the temporal mandates of the assessment period, and therefore the potential problems that result from it, are applicable to everybody who claims Universal Credit.

5.1. The loss of Universal Credit payment

As noted earlier, UC will pose a problem for people whose wages are paid on a weekly, fortnightly and four-weekly basis (Tucker and Norris, 2018; Toh, 2020). People who are not paid monthly but rather every four weeks will encounter certain assessment periods over the course of a year that capture two payments at once, one at the beginning and one at the end of the period. For instance, someone who receives their wage every four weeks will receive two sets of wages in one assessment period roughly once in every 13 months and may receive reduced or no UC payment following this. Even if in the subsequent assessment cycle their UC payment will be higher, they can experience problems related to cash-flow (Bennett and Millar, 2022).

This property of the system has caused material and mental difficulties for seven of our participants, who describe feeling stress and inequitable treatment, as well as impacts on family members and major life decisions. Olivia, a white Scottish woman in her late forties raising a teenage daughter, worked at Morrisons (a major food retailer) where she was paid four-weekly; she described not being able to predict how much UC payment she would receive and not being able to budget properly as “horrendous” and eventually moved to another job, telling us that the four-weekly pay was “a big factor” contributing to this major life change. Lidia, a white Spanish woman in her early twenties, reported similar difficulties working in a restaurant as a waiter and receiving wages every two weeks, sometimes resulting in three wage payments in an assessment period. Lidia told us, “it was screwed a bit for the next month because of just how the payments work with my company,” adding that it was stressful to “count the dates” to see whether she would be paid her UC payment or not. Patricia, a white Scottish woman in her early 50s, received her monthly wage early in December ahead of Christmas, causing both November and December payment to fall in the same assessment period. Patricia did not receive a UC award the next month, and, as her rent is paid directly by Universal Credit (the direct-to-landlord payment), this caused her to fall into arrears.

The case of Rose, a white Scottish woman married to Will, a white Scottish man, illustrates the impact of UC’s temporal misalignment on families. Will, who works for Tesco, receives his salary every four weeks and was paid twice in one assessment period, resulting in a lower-than-usual UC payment. The misalignment happens to the couple roughly twice in a year and “is always a shock.” Since their next salaries arrive some weeks later, they “have a ‘student meal’ rather than a proper meal” during this time.

Claimants perceive the misalignment as unfair. Katarzyna, a white Polish woman in her late twenties, recalled how there were months when she received five sets of wages, which led to her being “worse off just because [she] was being paid weekly”. A mental health administrator who raises two children as a single mother, Katarzyna understands she “earn[ed] the same amount of money as someone who [was] paid monthly but [the difference was] just the way the money [came] into the assessment period”.

As a final case we highlight Fiona, who works as a cleaner in a school and receives her salary every four weeks, which means every year, two of her paydays will fall within one monthly assessment period. Fiona was not certain when, exactly, this double payment will occur, so to reduce her uncertainty and help with budgeting, Fiona sent a message through her UC journal in August 2022 asking for clarification:

> Good morning, I get paid the 1st of September and the 29th of September because of the way that month worksite get paid every 4th Thursday, so what happens there? I’ve herd [sic] horror stories I won’t have my rent paid etc etc I’m just wondering how all this works out. Thank you.

Fiona shared with us via text message her worries about putting enough aside to cover rent and her children’s school meals:

> i will need to put money aside for my rent , as they help towards my rent now , i only get 1100 wages a month 3 of us live at home i do 40 hours but cause i get all school holidays i get a lower pay grade if that makes sense . plus i’m not entitled to school meals so i will need to make sure my kids have lunch money for an extra month ...

Though she provided the relevant dates and details through her journal, Fiona could not get a confirmation from her UC case manager about which month’s UC payment would be affected and instead received generic messages for people whose salaries are paid four-weekly.

Frustrated, she wrote to us on 22 August, “i feel like it’s pointless speaking to them. (...) It’s just a pain in the back side.”

At the beginning of November Fiona checked her statement in her online account and found she would not get her entitlement in her upcoming UC payment due to the double salary falling in the prior assessment period. She wrote to us on 2 November, “i’m not getting a november pay it’s come up £0 no one told me.”

Human Rights Watch described the earnings data generated at the end of each assessment period as an “incomplete snapshot” since it does not capture *what period of work* that the earnings cover (Toh, 2020). UC’s interpretation favors a simpler, more computable understanding of how to calculate income: earned income received in a set period. Yet in the court case *R Johnson v SSWP*, brought by the Child Poverty Action Group against the DWP, a lower Divisional Court, reveals how the law for calculating income could be interpreted differently, since the Court advocated for UC to consider as well the period of work any earnings correspond to in its calculation of income. The lower Court said in 2019 that the DWP should make an adjustment to discount earned income paid in an assessment period that does not actually correspond to work done in that period (England and Wales Court of Appeal, 2020) [20].

DWP argued that the lower Division Court’s interpretation was incorrect because it is not easily computable — it “throws the whole operation of the universal credit system approved by Parliament into confusion because the calculation of the appropriate award for each assessment period for the millions of claimants each month is an automated process requiring clear, easily identified inputs” [21] — the clear input being the amount received during the period, irrespective of whether it relates to work done in another period. In other words, the easily computable unit determines the approach for calculating income for UC. DWP’s calculation leaves out the other part of the definition, the time period that the income relates to, even though a lower court ruled it was reasonable to include it.

A Court of Appeals judge overturned part of the lower court ruling in 2020, agreeing with the DWP that the lower court’s interpretation would undermine the automatic calculation, and so “undermin[e] the scheme as Parliament intended it to operate.” [22] In essence, the Appeals court judge found that the intention for UC to be automated should dictate the definition of the principle for calculating income: “the system of universal credit is intended to be automated so that the calculation of the monthly amount can be performed by a computer rather than a DWP officer able to make an evaluative determination.” Here, what DWP claims is technically feasible guides the interpretation of law.

Yet this punitive design remains one choice among other options. Richard Pope (2020), an early designer of UC, recommends that the DWP offer various payment cycles, such as biweekly payment and assessment periods, as an option for claimants to choose. Such an approach would require a policy change away from the month-based payment: it could leave automation in place but allow a more flexible temporality, so that claimants such as Fiona would not experience a loss of entitlements and stressful uncertainty about how to budget for the loss.

5.2. The loss of reimbursable childcare costs

In the first case, we have described how claimants experience an inflexible temporality when UC’s monthly assessment period conflicts with the monthly earnings cycle of their employer. In this second case, we describe how the monthly assessment period tightly structures the experience of receiving childcare reimbursements and can be used to set parameters for denying it.

At the time of writing, UC will pay back recipients of Universal Credit 85 percent of the total amount they spend on childcare costs. To receive reimbursement, claimants must be in work and have dependents under 16, and they must use the services of an approved childcare provider from a register maintained by DWP. After making a payment upfront to the childcare provider, claimants submit their receipts through their digital account and, if needed, supply additional information about the provider. UC’s approach to childcare is different from legacy benefits, such as tax credits, which paid recipients up front for childcare costs.

Scholars and advocacy groups have noted the difficulties people experience with this process. Save the Children UK found varying levels of awareness among parents that UC will reimburse childcare costs, and among parents who did, some lacked basic information about deadlines for submitting receipts so that reimbursement is included in the next UC payment (Averill, *et al.*, 2019). UC case workers approve childcare receipts before reimbursement, and, because authorization can take a few days, claimants must submit their costs ahead of the arrival of their monthly UC statement, which happens about 5–6 days before their UC payment date. The Child Poverty Action Group (CPAG) wrote that claimants struggle with the reimbursement process’ complicated rules and procedures, especially when submitting receipts that cover either a part of an assessment period or multiple assessment periods (Howes and Jones, 2019). CPAG also notes how parents have a “very limited time to report” childcare costs [23], as parents must report them by the end of the assessment period the costs relate to and late reporting of childcare costs can result in the loss of reimbursement (McKechnie, 2021, 2019) [24]. In our study, we found that the assessment period becomes a punitive temporality creating arbitrary barriers to reimbursement.

Amongst our participants, only five claimed childcare costs; many others, despite having young children, did not. One of the participants claiming back childcare costs never experienced problems with the reimbursement, and another only started to use this option midway through the study, as she was not aware of it beforehand.

Based on the accounts of the other three participants, we found that parents must navigate the temporal features of UC to minimize the time between paying upfront for childcare and reimbursement. Susan, a white British woman in her early forties raising a child, noted how she stays vigilant every month to ensure her submitted childcare costs are included in her next UC payment — otherwise, she would wait an extra month for reimbursement. Susan described how late authorization, which happened to her multiple times, can cause financial problems. Emily, a white and Black Caribbean woman in her late 30s and mother of two children, told us how difficult she found paying for childcare costs upfront: “I was always £1,000 behind, and because I never had £1,000 to pay in that assessment period just to get that money back from them, it was just a vicious, horrible circle.”

The case of Alina, a claimant in her early thirties and the single mother of a young son, illustrates an additional feature of the reimbursement process: a strict temporal rule about the timing of submitting costs and receiving reimbursement. At the time of her problem with the childcare payment occurred, Alina was working two part-time jobs, one as a family liaison worker in a special school and another as a support worker for people with disabilities. In May 2022, she paid for a place in a holiday club to be held for her child during the summer school break in July and August. Alina made the payment early, in May, to secure a place, and she submitted her costs for reimbursement that same month. She expected her reimbursement in her June payment and made an inquiry once she saw it was not reimbursed; she was told by a case manager that her childcare costs would be included in her July UC payment.

When Alina still did not receive reimbursement in July, she made further queries, and a different case manager told her that the childcare costs would now be included in her August UC payment, as the costs were for a holiday club taking place in July-August.

Her August payment arrived, however, and the childcare payment was again not included. In September Alina finally received a partial reimbursement without explanation. When she asked her case manager, she was told she would not be paid back the whole amount because she paid *too far in advance* and can only claim up to three months’ future childcare costs at a time, which is counted in assessment periods (used as a unit of measure for time passing). Part of the holiday club was held in August after the third assessment period ended, thus Alina would not be reimbursed for this part of the costs. Her case manager explains, in somewhat tortured language, how Alina’s assessment periods set parameters for reimbursement only up the fourth of September:

> You reported your childcare costs in May and reported that the costs were for 28/07/2022 to 15/08/2022 this is 4 assessment periods in advance, your assessment period is from the 5th of each month to the 4th of the next month. So the assessment period you reported the costs was 05/05/2022 to 04/06/2022 and this is the first assessment period. The second assessment period was 05/06/2022 to 04/07/2022 and the third assessment period was 05/07/2022 to 04/08/2022. You can only claim for up to 3 months of future childcare costs at a time.

The language on gov.uk’s Web page detailing the regulations on Universal childcare costs puts the constraint in this way: “You can also claim back up to 3 months of future childcare costs at a time. We pay these costs back month by month — not in one lump sum.” [25] The Web site’s language reflects regulation 34A of the Welfare Reform Act of 2012, which states:

> Charges paid for relevant childcare are attributable to an assessment period where ... c) those charges were paid in either of the two previous assessment periods for relevant childcare in respect of that assessment period.

Overall Alina interacted with five different case managers and was told about the temporal constraints only after three months of interactions, during which she received contradicting information. Alina decided not to pursue the matter any further and summarized her experience to us:

> Basically it turns out I claimed too long in advance didn’t know this was a thing ... I’m just going to leave it at that, but I’m quite gutted that I was not paid back the full amount

The difficulties caused by this limitation came to the attention of the Work and Pensions Committee in the House of Commons in March 2022 in the Inquiry on Universal Credit and Childcare Costs [26]. Yet the law continues to discount the needs of parents who must secure childcare several months in advance or risk losing it altogether. Again, in this case we find that UC applies a narrow temporality that disregards claimants’ lived experiences and alternate temporalities, leading to a loss of entitlements.

6. Discussion and conclusion — temporal punitiveness

We argued earlier in this paper that digital systems can shape experiences of time. In the case of Universal Credit, the traditional temporal mismatch between months and weeks is reproduced in a digital infrastructure. UC's temporal norms are mandatory: if a person is not able to conform with its timeframe, a *de facto* punishment in the form of lost entitlements will follow. People who work and earn wages already have a clock to live by, and for some claimants, the two clocks are not aligned. The determination of this temporal norm is based on a very narrow view of employment that discounts self-employed people and sectors that pay wages weekly, fortnightly or four-weekly or are part of the gig economy with zero-hour contracts. In our study, claimants paid monthly were less affected by UC's temporality and experienced little to no uncertainty about their payments — for them the system works well. Regarding the rules around the submission of childcare costs, these set an arbitrary timeframe in which claimants can perform the tasks required to receive reimbursement, but this temporality does not always align with the needs of parents to secure limited childcare slots months in advance, and there seems to be no computational or policy-related reason given as to why this rule must be the case.

Scholars and activists have explored the punitive nature of welfare and Universal Credit particularly in relation to sanctions and work conditionality (Wright, *et al.*, 2020; U.K. Economic Affairs Committee, 2020; Schram, *et al.*, 2008; Vidra, 2018). UC is in line with trends in British social security since at least the mid-2000s, when it began requiring certain 'worthy' behavior and the performance of reciprocal duties from benefit recipients [27]. Welfare reforms in the U.K., especially between 2010–2015, expanded, and intensified behavioral conditionality and phenomena such as claimant commitments, and financial sanctions increase the punitiveness of the welfare system. Scholars have found that UC also favors punitive conditionalities and economic rationality based on narratives of benefit dependency and worklessness while underplaying or ignoring structural causes of long-term unemployment (Wiggan, 2012).

We identify temporalities as another key source of punitiveness meted out by Universal Credit. Temporal assumptions and temporal rules are a form of governmentality (Foucault, 2007), and not being willing or able to comply with such rules can result in punishment. We propose the concept of 'temporal punitiveness' to characterize a situation if the following are true: a) disciplinary power is carried out through temporal domination with the intent of shaping people's or groups' behavior, b) the person or group have their temporal autonomy lost or taken away in the given situation, and c) the exercising of disciplinary power can result in some form of punishment for someone who cannot or will not comply with the temporal constraints.

As to the nature of punitiveness, we demonstrate how problems and difficulties caused by the fixed monthly assessment periods have been known for years and brought to the attention of policy-makers and legislators. The fixed monthly assessment period has been a cornerstone of Universal Credit from the beginning (Hall, 2022) and a deliberate policy-based design choice that aligns with current social security legislation; Neil Couling, the Director General, Change Group at DWP, considers it the 'core DNA' of Universal Credit and that changing it is a 'very complicated task' because 'so much hangs off that monthly assessment period in terms of the rest of the system design' [28]. However, Pope (2020) believes more flexible options are within the realm of possibilities. Thus, we argue that we describe deliberate punitive measures brought upon low-income people.

In the case of Universal Credit, temporal norms are a type of disciplinary power exercised over low-income people. As shown here, the temporal norms affect the lives of partners and dependents as well. Such persons may already be marginalized in society and by depriving them of money and creating cash-flow problems that can lead to debt, loss of opportunities and stress, UC's temporal features exacerbate this exclusion still further. FM

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Notes

1. Goodin, *et al.*, 2008, p. 3; Zeckhauser, 1973.

2. For discussions on welfare conditionality and entitlement see Dwyer (2019).

3. Auyero, 2011, p. 25.

4. Whelan, 2020, p. 870.

5. Sharma, 2014, p. 83.

6. Wajcman and Dodd, 2016, p. 3.

7. https://www.gov.uk/universal-credit.

8. https://www.gov.uk/government/publications/completing-the-move-to-universal-credit-learning-from-the-discovery-phase/completing-the-move-to-universal-credit-learning-from-the-discovery-phase.

9. Plantin, *et al.*, 2016, p. 299.

10. Lianne Anderton, "Intelligent Automation Garage: Using automation for good," at https://careers.dwp.gov.uk/using-automation-for-good/.

11. Universal Credit offers a budgeting advance to claimants during the first month after they sign up UC, as the first payment does not arrive until five weeks after the claim is submitted. Due to this feature of UC, many claimants start out as debtors to DWP and see the amount they owed taken off automatically from the UC payment. See https://www.gov.uk/guidance/universal-credit-advances.

12. Pope, 2020, p. 4.

13. At the time of writing, the minimum standard allowance for single people over 25 is £334.91 and for cohabitating partners £525.72 (for both). See https://www.gov.uk/universal-credit/what-youll-get.

14. However, if a claimant or their partner is responsible for a child or young person or they live with a disability, the taper rate is only applied after their income reaches a certain amount (called the 'work allowance'). See https://www.gov.uk/universal-credit/how-your-earnings-affect-your-payments.

15. This 'nil-UC threshold' is calculated by using a formula personalized for every claimant. Details on this threshold can be found in the Universal Credit (Surpluses and Self-employed Losses) (Digital Service) Amendment Regulations 2015: https://www.legislation.gov.uk/uksi/2015/345.

16. If a claimant or household's income rises by less than £2,500 above their assessed rate from the year before, the actual income for the year is disregarded and they are not required to pay back the part of the tax credit award they were overpaid. However, if their income drops below the assessed level and rises again in the same year, they are then required to pay back the overpayment.

17. The Child Poverty Action Group (CPAG) challenged the rigidity of the monthly assessment period regime and how earned income is calculated for certain

claimants in the court cases *R (Johnson, Woods, Barrett & Stewart) v SSWP* [2019] EWHC23 (Admin), see https://www.judiciary.uk/wp-content/uploads/2019/01/johnson-and-others-judgment-final.pdf; *SSWP v Johnson, Woods, Barrett & Stewart* [2020] EWCA Civ788; see https://cpag.org.uk/welfare-rights/test-cases/test-case-updates/universal-credit-earned-income-and-monthly-pay.

18. See https://www.gov.uk/government/publications/universal-credit-different-earning-patterns-and-your-payments/universal-credit-different-earning-patterns-and-your-payments-payment-cycles.

19. https://www.gov.uk/government/news/new-budgeting-support-for-universal-credit-claimants#:~:text=Universal%20Credit%20is%20a%20single,many%20people%27s%20wages%20are%20paid..

20. Quotes from this case taken from https://www.bailii.org/ew/cases/EWCA/Civ/2020/778.html.

21. https://vlex.co.uk/vid/secretary-of-state-for-845550067.

22. https://www.bailii.org/ew/cases/EWCA/Civ/2020/778.html.

23. Child Poverty Action Group (CPAG), 2018, p. 5.

24. According to the Gov.uk's guidance on Universal Credit childcare costs, "You can claim back up to 3 months of past childcare costs at a time — but if you're claiming for more than one month you might not get all the money back." — https://www.gov.uk/guidance/universal-credit-childcare-costs

25. https://www.gov.uk/guidance/universal-credit-childcare-costs.

26. House of Commons Work and Pensions Committee, "Inquiry on Universal Credit and childcare costs, Oral evidence session on 2 March 2022," at https://committees.parliament.uk/oralevidence/9814/pdf/.

27. Larkin, 2007, p. 319.

28. "Work and Pensions CommitteeOral evidence: Universal Credit and childcare costs," HC 871, 20 April 2022, at https://committees.parliament.uk/oralevidence/10117/pdf/.

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