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The Intricacies of the Ordinary

INTRODUCTION

In this study, we extend the use of our heuristic for sense assembling sociological reasoning to one of the major modes of sociological empirical research, longitudinal case analysis. The investigation we examine is Laura Hamilton and Elizabeth Armstrong's *Partners and Professions* [Hamilton and Armstrong 2021]. We have chosen this study for its very ordinariness. It has no pretentions and is as routine a piece of sociological analysis as you could wish to find. Its very routineness is what makes it attractive as an illustration.

Section 1. Problem Statement

The report presents a twelve-year study of the life histories of a single cohort of 45 University-educated white women. It tracks them through college and into early maturity. In so doing, it touches on various aspects of these women's lives but its central theme is social mobility. In the diagram below, the results are summarised as pathways which the cohort of women took through a social space defined by class structure.[1] This is the sociological world (domain) being described.

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[1] There is a whole seam of analysis to be worked out regarding sociological reasoning through diagrams. We will not pursue it here.
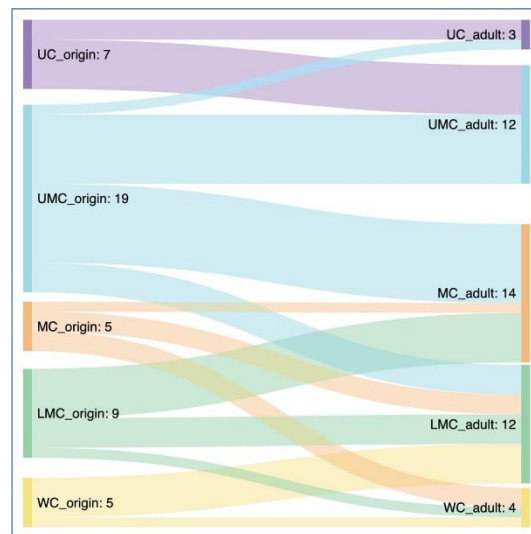
Figure 1 From Hamilton & Armstrong, p. 117

Hamilton and Armstrong summarise this world in the following way:

> (The figure) offers a visual representation of flows from social class of origin into adult class locations at age 30. The figure vividly illustrates the stickiness of social class. Among adult white women, the upper class and upper-middle class are composed entirely of those who started in privileged families. Fifty-eight percent of women who started in privileged social class positions remained so as adults. Women from privileged families typically did not fall further than the middle class, and none landed in the working class. The four women who experienced the steepest downward mobility were still relatively protected in the lower-middle class. [p. 116]

REGISTRATION

The trajectories in Figure 1 are a set of sociological objects constructed from the initial and terminal locations of the social actors (the investigation's subjects) in the defined social space. The pattern those trajectories form is the outcome or consequence of the women concerned having followed different "class strategies" or "projects" as they moved through college and into early maturity. These projects motivate "bundles" of decisions taken over time in pursuit of a desired set of future personal circumstances. Three of the projects are profiled in the report:

1. Gender Complementarity: the matching of female skills in the domestic and social spheres to men's skills in the economic sphere.

2. Professional Partnership: the maximising of success in both the labour and marital spheres.

3. Self-Reliance: an ambition to achieve economic independence within or outside of marriage.

Projects are sociological objects constructed from the data Hamilton and Armstrong collected. A third set of objects presented are sociologically defined "social classes", namely the components of the structure of the social space through which Hamilton and Armstrong trace the women's mobility. The research formulates the detail of individual women's life histories in their social worlds as being within this or that class whilst pursuing one or other strategy. As a result, the women "trace a trajectory" through the class-defined social space. Membership of these equivalence classes defines the women as sociological objects and the social space of their trajectories defines the sociological world for analysis. Hamilton and Armstrong's account is designed to ensure the evidential realism of the social objects can be carried over to the sociological objects thereby securing the account's plausibility. In turn, this conjunction allows Hamilton and Armstrong to frame causal connexions from projects to trajectories as strategically adopted responses to the impact of contingencies in the life histories of the women.

CHARACTERISATION

The property set attributed to the constituents of Hamilton and Armstrong's configured world is very sparse. It consists of location in the social space based on family of origin class and point-mass. This set is filled out by the stipulation of other 'facts' which act as premises for the analysis. For Hamilton and Armstrong, these latter facts are the specifications of class. This is a list of characteristics by means of which class is 'identified':

(a) Parents' Education
(b) Woman's Occupational Role
(c) Partner's Occupational Role
(d) Household Income ($k)
(e) Family Wealth
(f) Residential Location
(g) Family Structure

This list serves to erase all other social characteristics for the subject group. The respondents become point-masses loaded with what might be thought of as a class charge displayed as

quantitative and qualitative values against the stipulated categories. As a result, the operation of the target system and the conditions it can display are constrained to just those associated with these features. Only data relevant to them will be relevant to the analysis.

Stepping away from the detail for a moment, we could suggest the core of Hamilton and Armstrong's approach is a solution to a *qualitative* differential equation. Changes of class position over time result from the pushes and pulls consequent upon changes in class categorial values. The mobility trace for a respondent is a 'nominal' (up, down, flat line) as opposed to 'numerical' solution to this 'equation'. These solutions are then grouped as the trajectories depicted in *Figure 1*.

NOTATION

Figure 1 provides a good example of configuring a target world-for-analysis. The slice of social world being investigated is set out as a 'social geometry' whose dimensions are class and time. [2] Each trajectory represents a combination of individual traces through that social space. As just described, under this conception individuals are 'social point-masses' moving over time through the class structure. Although Hamilton and Armstrong are not explicit about it, the way their investigation is set up suggests they are using an inertial frame of reference where the 'null hypothesis' (to use that term) is:

> At t_0, social point-masses occupy a class position of origin derived from their parents. Once in motion, each point-mass stays in its class of origin unless impacted by sufficient social forces to give it 'exit velocity'.

What Hamilton and Armstrong investigate is the range of social forces at work on their subjects' actions and what impacts they have on their inertial paths. The trajectories generalise those impacts. In presenting their results, Hamilton and Armstrong provide a discursive 'integration' of the relative effects of such forces on the trajectories set out.

Section 2. Problem Specification

The relationship between sociological phenomena and social data is mediation not isomorphism. Such mediation often makes use of standard tropes to shape the character of the processes at work in the target social world. The master trope in Sociology is the contrast between appearance and reality. For Sociology, 'reality' is 'real-as-construed-within-sociological-theory'. This contrast is

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[2] Bourdieu's conception of social space is a two-dimensional force field. Although they draw on Bourdieu in a number of ways, Hamilton and Armstrong depart from him here. Time is not a force. Whether this vitiates the claimed "Bourdieusian" character of their analysis we leave for others to decide.

usually organised within a second order trope, that of 'levels', where surface level sociological constructs of daily social experience stand in some proposed (causal, functional, statistical, or other associative) relationship to deeper structures or where meso- and macro-levels emerge from micro-level interaction in daily life. A complex trope such as this is clearly shaping Hamilton and Armstrong's basic inertial frame. Its influence is clearest in their description of their own investigative intent and in their explanation of the notion of "class position". First, their investigative intent.

> In this article, we compare the class position of white millennial college-going women's parents (captured when women began college) to women's own adult class positions at age 30. Class position is assessed using education, occupation, income, and wealth. We focus on intergenerational mobility patterns—seeking to explain why and how some white college-going women reproduce parental class location, while others experience upward or downward mobility relative to their parents. Our data are uniquely designed to uncover these mechanisms. [p. 103]

What they take such "mechanisms" to be becomes clearer when they describe what makes up a "class position".

> Class positions are characterized by not only differential access to economic resources but also distinct tastes, habits, and dispositions—what Bourdieu (1984) describes as "habitus." Habitus includes, for example, knowledge and comfort with higher education, socialization patterns (e.g., wine drinking in Napa vs. beer drinking in the back of a pickup), material consumption (e.g., designer clothing vs. big box store clothing), and mode, duration, and location of travel (e.g., regular international vacations vs. rare travel). [p. 109].

Although this summary simply associates various activities with different class positions, the theorised association carries the (causal) nexus associated with the notion of "mechanism". The women made the various choices they made for the reasons they did, little realising they were being 'processed' by the mechanisms of social class.

The depiction just described is re-worked by Hamilton and Armstrong within a further global trope: strategic decision making and implementation. This trope provides an important rationalising device for rendering the undoubted mix of thought-through, ad hoc, impulsive and Hobson's choices the women made before, during and after their college education. These are treated as co-ordinated "bundles" and used to work out instrumental socio-structural logics.

> Class projects are strategies of action—specifically, patterned actions inflected by normative beliefs of what a desirable and attainable economic existence looks like, and how to achieve it, for people "like me" ..... Most class projects involve the desire for some improvement of existing circumstances or—in cases

> of privilege—reproduction of advantage. However, not all class projects aim for the top of the class hierarchy, especially when doing so runs counter to a moral codeor entails actions that are viewed as undesirable, even repugnant.....
>
> Class projects bundle what might otherwise appear to be discrete choices, linking them through an underlying logic. For instance, ideas about whether college is seen as realistic or necessary, the amount and type of parental aid that should be offered for college, what kind of career is appropriate, when and whom to marry, and how far into the life course parents should provide support are often packaged together .... Class projects often feel obvious to individuals—steps through which one is almost invisibly propelled. [p. 106]

The last trope we will pick out from Hamilton and Armstrong's work is so natural it is easily overlooked and its contribution to the shaping of their account thereby missed. This is the notion of *lifetime transitioning*. The use of transitions to organise sociological descriptions is almost as definitive of the discipline as the master trope pairings of appearance/reality and surface/deep levels. Where would its dominant theories be without the presumption of "The Great Transition" between feudalism and capitalism and the associated characteristics of that process, or explanations of the development of contemporary forms of economic and social organisation without the idea of a transition from 'value rationality' to 'instrumental rationality'? Transitions can be deployed to configure events at other 'levels' than the societal or organisational. In ordinary talk, the organisation of personal lives is often conceived as an evolution involving intense inflection points. Hamilton and Armstrong take a version of this commonplace, namely that education and especially Higher Education is, can or should be an important inflection point in someone's life and construct their research project around it. They are looking for patterns in the lifetimes of a sample of college educated women as they pass through the transition from late adolescence to early adult maturity. What clusters of resources, advantages, disadvantages, opportunities, barriers and enablers are associated with the each before they enter college and how do these clusters contribute to *shaping* the outcomes achieved by the women after they leave?

We have described the broad features of Hamilton ad Alexander's world-for-analysis and their description of the sociological objects in it. This world is configured to provide the conditions under which the patterns of mobility in that world can be displayed and analysed. Instead of choices over what is to count as data on the phenomena of interest, how that data is to be collected, codified, sorted and profiled and all the other aspects of the investigative reasoning process, representational choices can be seen as selections concerning the orderliness, appropriate sequencing of relationships and critical levels of their operation. And, just as the problematic possibilities of method are often resolved by using standard recipes, so too the

presentation of results often adopts a standard approach and with it a whole array of taken for granted tactics for constructing the course of analytic reasoning. In this process, registration and characterisation achieve the analytic form required for sociological investigation. They do so by formulating the problem as the 'idealisation' required.

System Laws

One key technique for producing disciplinary registration is category substitution. Here theoretical formulations of the detail of social objects and their properties are substituted for common sense ones.[3] Hamilton and Armstrong are explicit about their substitutions. For example, having briefly outlined the history of their project, they tell us:

> Our data stretch across 12 years of the life course and provide great detail on the evolving class locations of women from a wide range of backgrounds—including women whose fathers held leadership positions in Fortune 500 companies and women whose parents struggled to afford household essentials.
>
> By age 30, the women were still in vastly different, and in some cases precarious, economic positions. How did this occur? [p.103]

Note the switch. The women are no longer 'persons' in the ordinary sense but condensates (our 'point-masses') of their family's class location. This is an important analytic move.

They then go on to explain their investigative strategy:

> Building on a Bourdieusian framework, we argue that uncovering mechanisms shaping reproduction and mobility requires understanding the *class projects* in which families are engaged. [ibid]

The women and their families can tell their own stories of how they arrived at the station in life they were currently occupying and just what brought them to do the things they did in the ways they did to get there. Hamilton and Armstrong set aside all these individual reasons, motives, causes, forced choices and happenstances and replace them with a pair of sociological constructs: "reproduction" (the inertial state) and "mobility" (change in state). The women's life histories become exemplifications of social processes as portrayed by sociological theory. Such substitution

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[3]   To head one objection off well before it gets anywhere near the pass. We are well aware our data/phenomena categories represent just such a substitution.

is even more stark just a few lines later where, in discussing the women's choices of marriage or life partner and emotional commitments made therein, Hamilton and Armstrong bleakly observe:

> How individuals work to achieve a future class position is shaped not just by their familial social class location but also by their location in gender and race ..... For example, the returns to college for women flow, inpart, through access to college-educated men as marital partners.

We assume that if asked, most of the women would say they married for love or some other culturally endorsed value. We doubt any of them would justify their choices in terms of a discounted return on their investment in college education. The personal experience of marriage has been replaced by a sociologically framed calculus.

The important thing to remember about conceptual substitution as a mode of generalisation is the informality of rules applied. Such informality allows researchers flexibility to adjust the goodness of fit of their data to its conceptualisation in response to the nature of research materials and objectives in hand. Later we will look at how Hamilton and Armstrong are able to take advantage this kind of conceptual looseness to construct their phenomena.

BOUNDARY AND INITIAL CONDITIONS

Boundary conditions mark the points in the configured social space where the target system and its internal workings are severed from the surrounding environment. In Hamilton and Armstrong's study, the single boundary condition is the ascribed family of origin class 'loadings' attributed to each point-mass. These conditions are fixed. Nothing which goes on in the world-for-analysis can alter them, though any individual could traverse the space and end in a different achieved social class of their own. In the ideal case, boundary conditions ensure no active forces pass through to the target world once events in that world have been set in motion. As we will see, this ideal is hard to achieve, especially for the social sciences, and a relaxation of the firmness of the boundary conditions is often required to enable the construction of a workable account.

The system regularities attributed to the target system are key to providing this solution.[4] In the ideal case, such regularities contain enough inferential power to fill out the causal texture of the pathway followed. The inertial principle discussed above might appear to provide such a regularity; accounts of "reproduction" and "mobility" being analogies of the First and Second Laws

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[4]   We use the term 'regularity' here rather than 'law' because we do not wish to be misinterpreted nor drawn into the philosophical mire that is the debate over determinism, interpretivism, instrumentalism, realism and all the rest.

of Motion.[5] Actually, rather than being regularities, the first of these functions as a framing convention and the second is either a premise or an axiom. It is here sociology encounters much of its difficulty in providing end to end integration within its explanations. The required detail is either missing, unobtainable or has yet to be defined. The regularities which are generally accepted (e.g., 'The Iron Law of Oligarchy', 'the Pareto Rule', 'The Self-Fulfilling Prophecy', 'The Labour Theory of Commodity Value', 'The homeostatic character of social structures') are pitched at such a level of abstraction, they can only allow generalised glosses. Their operation cannot be followed in a close ordered fashion.[6] Later, we will see some of the ways this formidable challenge is managed.

The initial condition which sets the target system in motion is the respondents' taking up of a "class project". As we saw, Hamilton and Armstrong identify three types: Gender Complementarity; Professional Partnership; Self Reliance. These "projects" define a decision logic which drives the pursuit of the chosen strategy for attaining personal lifestyle objectives. This logic is the integrative function for an individual's mobility trace.

Operating Conditions

The primary interest of the investigators is the identification of the range of demands and challenges faced by each respondent and the actions taken to resolve them as they move along their trace. These are coupled with the resources available to the respondents and consequently their capacity to continue to implement their chosen strategy. They are the 'contact' and 'at a distance' forces which either reinforce the original class inertia or cause shifts (upwards and well as down) in a mobility trace. Illustrative detail from individual respondents is used to document these operative conditions. We will return to the use of this detail later but, for now, here are two examples. The first is of 'upper class gender complementarity'.

> Ongoing parental support also bought women the luxury of marrying someone who did not quite fit the bill. For example, Hannah's father urged her to "just go for the money" and date the investment bankers she met. Yet, Hannah rejected these men. Her father, a CFO of a Fortune 500 company, was able to use his ties to secure her a job in the sports media industry. Hannah would marry a coworker, who (at $105,000) earned just slightly more than she did. His family was affluent but not as wealthy as hers. She recognized that she would never "be at the level that my parents are at in terms of

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[5]   We ignore the Third Law because it requires the identification and measurement of forces and the vector changes they induce (degree of attraction or repulsion). The kind of sociology pursued by Hamilton and Armstrong does not have the instruments to determine these properties (or their surrogates) for objects in a social space. As a result, if they are invoked, such properties are set by fiat.

[6]   By "close order", we mean no gaps, no jumps and no resorting to magic wands, incantations and conjuring tricks.

> making money." Yet, it did not matter. Her family's continued subsidy ensured that Hannah and her husband remained in a privileged class location. They lived in a $3,500 a month apartment only a 10-minute jog from Central Park in New York City. [p. 121]

The second is an instance of 'upper class professional partnership'.

> Bridge funding after college made geographic mobility to thriving labor and marital markets possible. Both Lydia and Erica's parents helped their daughters get on their feet after graduation, funding moves, paying deposits, providing furniture, and offering a car. These parents typically stopped support as soon as they believed their daughters were able to produce a comfortable life on their own. Thus, as Erica's father indicated after she graduated, they would only need to give Erica a car and pay a few bills because"she'll be making pretty good money working." [p. 127]

STRATEGIES OF EFFACEMENT

The description of problem formulation and registration given above is very much couched as 'the ideal case'. No research report ever conforms to the ideal case. Inevitably, adjustments, modifications, re-workings and relaxations of guiding rubrics are needed to manage the contingencies associated with the problem in hand, the fit of its data to the sociological phenomena invoked and the details of the case being made about them. In this section, we describe various coping strategies Hamilton and Armstrong use when faced with these sorts of practical problems as they configured their world-for-analysis. Later sections will address similar of problems relating to the presentation of results and the construction of the case being made about them.

Ontological Elision

When we look at *Figure 1*, we do not see the trajectories of every individual. We are looking at a summative depiction. Misleadingly, sociologists often refer to summaries like this as 'ideal types', which they are not. They are not theorised abstractions over data but informally computed elisions. Each individual trace is the outcome of a multitude of contingent factors. The process of moving from initial state to terminal state is stochastic.[7] What, in effect, Hamilton and Armstrong do is sum over the probability distributions for the members of each social mobility equivalence class using

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[7] Each path represents a complex of probability distributions whose integration Sociology at present has no hope of specifying, let alone calculating.

the discursive equivalent of modal regression.[8] Each individual track is treated as describing a path broadly following the central tendency of the category to which the individual is allocated adjusted for the 'error' generated by the contingent factors relevant to them.[9] Such 'error terms' are dropped from the account by a tactic of 'descriptive lifting' when respondents are 'lumped together' along the central tendency of the total category to which they have been allocated.

There is real advantage in descriptive lifting, but it comes with a rider. The advantage is simplicity. Using the central tendency reduces the volume and complexity of the differentiating detail which would otherwise have to be provided. The 'lifting' Hamilton and Armstrong employ prevents them from having to work out how to enumerate and weight the contingent factors contributing an individual 'error term'. The rider is that in so doing they efface the detail of the social forces generating the paths which the respondents follow. This detail is what their investigation is aimed at. Difficult sociology is avoided at the price of generalised imprecision and causal relaxation. Effacing in this way achieves ontological reduction (a kind of behind-the-scenes Occam's Razor) which reduces the range of types of social actor in the space and hence the overhead of detailing and justifying the characteristics provided for every sub-type. Here is an example of this regression lifting at work and the effacing it achieves. It is another from the section on 'gender complementarity' as a means of achieving the project of privilege reproduction.

> Among the nine women who reproduced privilege, seven were socialites on the "party pathway" during college. Their wealthy families, who benefited from both class and racial privilege, had deep pockets and dense ties to other affluent families. The modal way this group reproduced privilege was to pass economic resources across generations. These families offered ongoing support, or continuous economic and material sup-port during and long after college, that positioned women to marry men from privileged families who were making very substantial salaries (see table 3). These parents did not assume that women would contribute sizable economic resources to the project.

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[8] An alternative metaphor might be the 'mean field approximation' technique used in Thermodynamics. A swarm of 'energised' particles take vectors which are summarised in a single measure of the 'state' of the field. See [Bahr and Passerini 1998a; Bahr and Passerini 1998b].

[9] We do not intend 'central tendency' to be interpreted in a quantified sense, but as an informal majority-approximating description. Hamilton and Armstrong talk of it as "modal" (hence our use of that term) but this must be an informal sense since no measures of a run of co-ordinates in the social space are offered nor tables of measures of variables for the counts of respondents allocated to the sub-paths making up classes such as the set 'reproducing privilege'. This is not surprising since not even Bourdieu has tried to be that specific in his analyses of trajectories across social spaces. We do, on occasion though, get some enumerations of some categories.

> Parents encouraged their daughters to focus on cultivating femininity and building elite networks. For example, Tara's mother urged her daughter to gain entrance to a sorority with "very exclusive and beautiful girls, all blonds, the best" because she calculated that marriage was the most certain route to class privilege: "I don't want Tara to be a career woman. I wouldn't want Tara to be a doctor. I wouldn't even care (for her) to ever be a lawyer. I would love (for) her to meet someone like that. (Besides) she wants to be a cookie-baking mom." [p. 119]

The individual traces of Tara and the "socialites" are reduced to a single track. The women are co-classed and the strategy sub-type substantiated.

Time Compression

Transitions involve re-locations in social space over time. For Hamilton and Armstrong's women, this is between their entering College and their 30th year. The trajectories track their locations in social space over that time frame. Except, of course, they don't. Discursive modal regression produces an interpolated path from position at t_0 when an individual entered college and t_n, their 30th year. Between those two points, moments from individual's life histories (jobs they took up, marriages they made and so forth) are described but a detailed description of the shape of the actual trace followed is not provided. No doubt, some women did follow a smooth glide across the space while others had equally monotonic ascents or descents all the way to the end point. However, given the stochastic character of the processes at work, for some (perhaps even many), the vectors will have exhibited a degree of volatility which would itself have to have been managed as part of the class project. This detail has been effaced from both the descriptions given and the summary depiction provided. What is avoided is the need to provide answers to the difficult (and unresolved) problem of specifying the point-by-point co-ordinates in the social space with sufficient precision to enable the identification of intervening locations and the weighting the forces at work in them. However, these formidable tasks would only yield fruitful analytic insight if at the same time we could solve the even more difficult task of defining the temporal granularity at which they were to be done.[10]

Permeable Boundary Conditions

Boundary conditions are controls on the cut with the surrounding social environment and thus what is and what is not contained in the world under analysis. As we saw, the boundary conditions in Hamilton and Armstrong's study are ascribed class of origin and achieved class at 30 years of

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[10] For those who like these kinds of allusions. It is often said Sociology of the Hamilton and Armstrong type is awaiting its Newton, and this might be so. But even if it gets him/her, it is also going to need its D'Alembert and Euler to provide recipes for ontological reduction and time compression.

age. In the ideal case, the determinants of we called the 'charge' or 'loading' of class each side of the boundary cannot be effective within the world-for-analysis. This requirement gives a neatly demarcated frame for the social space. However, in Hamilton and Armstrong's analysis legacy effects and anticipated consequences feature as active forces. Take Taylor for example. Taylor was a professional high achiever for whom professional successes justified the life decisions made. This justificatory shaping is extended to anticipated successes as well as those already achieved. Hamilton and Armstrong follow Taylor in her logic by using anticipated successes as part of allocating her to her equivalence class.

> At the time of the age 30 interview, Taylor was a practicing dentist, making a salary of $130,000, and she was considering purchasing the dental practice of a retiring dentist. We confirmed that she successfully opened her own practice, boosting her income to $200,000. [p.126]

Melanie, on the other hand, relied on pre-existing networks to acquire a potential marriage partner from among her college peers.

> Melanie met Ben her first year in college. Ben had grown up in a Chicago suburb 10 minutes from her home. Melanie knew people from his high school. They even went to the same summer camp as children. At college, overlapping peer networks, developed through a largely affluent and white residential Greek system, drew the two together. [p.120]

The point is not that people shouldn't use their family or social networks to help them in their early careers but that the use of such networks as a social force determining class location is being included twice, once to determine class of origin and again to determine achieved class.

Both these examples speak to permeable boundary conditions and hence relatively 'loosely posed' problems. Others work in more subtle ways. To use the example mentioned earlier, the whole notion of the "reproduction of privilege" ties a child's success to the lifetime success of her parents. "Reproduction" is, of course, Bourdieu's term. In living their lives, social actors conduct their activities within culturally set patterns. They do not innovate on the pattern but improvise within in it. On such a Bordieuisan view, the relative lack of social mobility of a child which reproduces the social class of origin is no more than the continuous occupation of the class of origin derived from their parents.

Similar boundary permeability is to be found in discussions of the social resources available to each respondent for the pursuit of their strategy. Although the criterial definition of the space is class mobility and the features evincing such mobility are marriage partner, professional achievement and lifestyle, other sources are appealed to as well. We have already mentioned

parental resources accessed by both marriage partners and the use of pre-existing social networks. In addition, there are references to sorority choices, choices of post-graduate institution, choices over residential location, occupational background of parents and even the profession of one's spouse.

> For example, Sophie, whose extended family included many doctors, wanted to be a nurse who married a doctor. She spent her age 30 interview narrating her attempts. One doctor was too much of a "gunner" (i.e., someone who was overly ambitious at the cost of their relationship). She coaxed the second into dating, moving in, proposing, and marrying. Sophie explained, "I was more into him at first. He wasn't so sure (laughter). I think I was the more aggressive one. And, of course, he was still in med school.   But then he ended up liking me as much as I liked him." With a specialty in pediatric anesthesiology, her chosen mate was also a good financial prospect. Because Sophie had low earning potential and lacked a wealthy family that could compensate, marrying a high-earning man transformed her class trajectory. [p. 122]

The net effect of permeable boundary conditions is increased lack of clarity of problem definition. The 45 respondents in Hamilton and Armstrong's study are not the only social actors in the system. For some, the actions of parents are vital since they participate in the making of life choices and strategy selection as well as resourcing its implementation. For others, it is husbands and partners, social networks and even Governments and Corporate actors like universities. Of course, in ordinary life we know relatives, friends, acquaintances, employers and institutions matter in various ways and our common-sense explanations of how individual lives play out often lay emphasis on the influence they have. The current state of knowledge and methodological expertise in Sociology does not allow Hamilton and Armstrong to introduce ancillary 'objects' and the social forces they exert in a systematic and principled way (for example, by weighting personal v parental effects on College choices for different categories or by estimating net barrier v net enabler effect of presence or absence of parental wealth, or College experience). It is therefore impossible to modulate their effects for the context of any individual's case. Such complications and challenges are avoided by introducing the objects and their properties as part of illustrating a particular life history rather than a teasing apart the causal texture of the problem set.

Merging Initial and Operational Conditions

The initial condition for the system is the choice of class project or strategy. These are defined in broad brush terms. Operational conditions, the conditions applying in the social space and which shape the eventual position respondents occupy at age 30 are the contingencies and exigencies faced as they pursue their strategy. The analytic task is evaluation of how effective the strategies

are for achieving the original lifestyle objectives. As we have already suggested, in the accounts given for many of Hamilton and Armstrong's respondents, boundary conditions also function as initial and operative conditions. Choices, their adopted strategies and capacity to implement them are "overdetermined" (p. 124) by class position. What is called "class reproduction" (the base case) turns out to be ascribed class continuation. This outcome is what Hamilton and Armstrong dub the "stickeyness" of class, an observation they cite as one of the major findings of their study. In the case of class reproduction, the configuring trope of a transition from ascribed condition to achieved condition appears to misrepresent what is going on. What the study reveals is the radiation of the boundary condition through the operational conditions. This is a consequence of the inability to specify the detail of the initial and operative conditions. As a result, Hamilton and Armstrong have no choice but to 'reproduce' the boundary condition—the social class position of the respondent's parents—because the intermediate 'mechanisms' are beyond analytic reach.

Section 3. Analytical Protocols

ANALYTICAL PROCEDURES

The conclusion we draw from the list of 'troubles' we have discussed in relation to managing the practicalities of configuring the world-for-analysis in sociological reports is that reliance on the solution set, boundary and initial conditions cannot sustain the transformation of data into phenomena. Something more is needed. The solution Hamilton and Armstrong use is 'instanced reasoning'. We have just seen how members of the categories of social class are 'instanced' by members of the equivalence class data. But this kind of referencing to data is insufficient. What is required is reasoning over them; the provision of a set of logical steps which secures the plausibility of the case being made. Hamilton and Armstrong need a logical path from categories of data to instanced categories of phenomena. The term for the provision of paths such as this is 'transitivity'.

It will be easier to appreciate the challenge and how well Hamilton and Armstrong do if we introduce a smidgen of formality. We have said the study utilises two 'global' equivalence classes, data and phenomena. The data class is composed of the detailed ethnographic, survey and other material concerning each respondent gathered into "class projects". The phenomena class is composed of sociological specifications of social class and social mobility trajectories. Each member of the phenomena class is further partitioned as set out earlier.

At the global level (the-world-for-analysis), we have a set S which consists of all the members of the data and phenomena classes. This allows us to say:

a.   'Gender Complementarity' is a member of S or 'Upper Middle Class' is a member of S. In general, let's write that as 'For all x, x ∈ S'.

b.   Gender Complementarity is a class project. We can call the equivalency relation 'class project' ([a]). 'Professional Partnership' and 'Self Reliance' also have the equivalence relationship [a]. Let's write that as {x ∈ S : x ~ a}

c.   Let's define the equivalence relation of being a 'social class' [b] and being a mobility trajectory [c]. We now have a set of possible relationships.

   i.   a ~ a for all a ∈ S. This is the reflexivity relation among the members of [a]

   ii. a ~ b implies b ~ a for all a, b ∈ S. This is the symmetry relation of a and b

   iii. If a ~ b, and b ~ c, then a ~ c for all a, b, c ∈ S. This is the transitivity relation among a, b, c.

What the steps in i.–iii. give us is a pyramid of equivalences. If Hamilton and Armstrong can establish instances of class projects as equivalent to categories of social class and categories of social class as equivalent to mobility trajectories, they will have secured a logical pathway through the pyramid. Whether they will have also secured a causal pathway without the specific detail we noted above is another matter. At this point, it is important to remember equivalence is not an identity relation. The chosen "class projects" are equivalent not identical. So are the social classes and mobility trajectories. It follows the pathway is not saying 'Gender Complementarity' is identical to 'Upper Middle Class' or 'Gender Complementarity' is identical to 'flat-line mobility trajectory'. What Hamilton and Armstrong do is set up broad associations among these classes. That is what 'instancing' does.

ANALYTICAL RESULTS

Possibly the best example of how Hamilton and Armstrong use this presentational strategy of instanced transitivity to display the phenomena of 'social classes' and 'mobility trajectories' is the story of Melanie. We quote it in full so its effectiveness can be appreciated.

> Melanie's story offers a rich illustration of how gender complementarity works. She was from an upper-class Chicago-area family—a socialite who was "worry-free in college. My parents (we)re fully supporting me, so I didn't even think twice about anything." Melanie met Ben her first year in college. Ben had grown up in a Chicago suburb 10 minutes from her home. Melanie knew people from his high school. They even went to the same summer

camp as children. At college, overlapping peer networks, developed through a largely affluent and white residential Greek system, drew the two together. Upon graduation Melanie and Ben moved to Chicago with friends from Greek life. Melanie's life in Chicago was underwritten by her parents, who provided the funds to purchase a condo in the city and an interior designer to decorate it. Melanie was a teacher in a charter school and then attended graduate school to get her MSW, funded by her grandmother.

During the same period, Ben went to law school. Despite the fact Ben's family was wealthy, like hers, Melanie was not ready to marry him until he completed his degree and took a position in his father's debt collection company. As she clarified after graduating, she needed to marry someone whowas "definitely motivated. I don't really like the real lazy type." Ben was promising because he was "so motivated." But he would not be a sure bet for another four years.

Given the homogamy between Melanie and Ben, connections between their families were close. After marriage, all holidays were jointly celebrated. Melanie was happy that her husband and father consulted on the new family's finances. As she explained, the two men "have a good relationship sothey talk about that together because I don't really understand all of it. It works out really nicely." At the time of the interview, Melanie was six months pregnant. Her husband assured her that she need not return to workif she did not want to, as "no matter what, we'll be financially okay." As Melanie noted, "That's a huge burden off my shoulders." Both sets of parents continued to offer support. Melanie's father had a savings account thatshe could access for her spending. When the couple purchased a more spacious condo after marrying, his parents furnished it as a wedding gift. Herparents were creating a well-appointed nursery for their grandchild.

Melanie's project required family wealth to provide her with a consistently lavish lifestyle. This lifestyle was necessary to maintain ties with her advantaged peers, through which she met Ben. Ben was one of many affluent, highly educated men in her social world; research suggests that this was a benefit of racial, as well as class, privilege .... Women like Melanie never intended their own careers to be a source of economic security. As Melanie noted before marriage, "My dream would be not to have to work,because my mom didn't have to work, and it made such a difference in mylife because she was always around." [p. 121]

Section 4. Conclusion

Hamilton and Armstrong use their instancing strategy to "save the phenomena". This tactic is often needed in sociological reporting because of the combination of rendering processes used to configure the world-for-analysis and Sociology's inability to detail those configurations. Sociological objects such as 'social class' and 'mobility trajectory' are generalised abstractions from and over the detail of each respondent's life history. Every one of those lives consists in a plenitude of possibly relevant detail which has been packaged up and summarised by Hamilton

and Armstrong in the responses to the interview questions, materials collected, commentaries made by families and friends etc., they collected. The resulting corpus of data is reconstructed to bring out the 'underlying' structures which it represents. Effacement is necessary to strip data of detail so that analysis can focus only on that which is deemed relevant or to avoid the problems set by the inability to amass the detailed data required. What demarcates the possibly relevant from the irrelevant are the boundary conditions laid down for the problem being analysed. What ensures access to the required detail is the state of sociological method. Clear and effective boundary conditions make for well set analytic problems. Well set analytic problems are constituted by the 'sociological phenomena of interest', in our case here classes and mobility trajectories. These are sociological abstractions and generalisations. Abstractions and generalisations don't have friends and families, get married, take up employment, vote for political parties or join country clubs. People (Hamilton and Armstrong's respondents) do.

Abstractions and generalisations stand in structural relations to one another. Sociological abstractions and generalisations stand in sociological relations to one another which in turn stand in representational relationships to the social phenomena they delineate. Hamilton and Armstrong started with a sample of the endless major and minor detail of a set of people's lives and reduced it to a set of sociological objects standing in structural relations. To sustain the plausibility of the designated structural relationships, Hamilton and Armstrong had to save their phenomena by hooking them back to the detail from which they were constructed so that the plausibility of the whole exercise could be secured. This they did in thoroughly conventional ways; ways they were at home with and could manipulate with analytic dexterity.

Partners and Professionals is a very familiar, very conventional and quite ordinary piece of sociological reporting. Because it is these things, other sociologists can follow it without trouble and understand the case it makes pretty much at a first reading. Such easy accessibility belies the work which goes into managing the practicalities of presenting these data and making a case about them. When looked at in this way, the intricacies of Hamilton and Alexander's reporting become visible. They reveal an organisation available for analysis and reflection.

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