



Money's mutation of the modern moral mind: The Simmel hypothesis and the cultural evolution of WEIRDness

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Abstract

A great number of theories have been offered as to the root of the difference between modern and premodern mentalities. One neglected account comes from Georg Simmel's *The Philosophy of Money*, which argues that the rise of the mass money economy in the early modern era encouraged calculative modes of thought, and took over the coordinating functions of a number of previously important institutions such as kin and religious networks, thus "freeing" the latter to evolve without strong material feedback. This paper considers monetary exchange and kin/religious networks as alternative strategies for coordinating the division of labor, and shows how the widespread availability of the former can alter the cultural-evolutionary constraints on the latter. This dynamic explains a number of salient differences between modern and premodern moral life such as money's profaning character, as well as the sociological significance of modern moral phenomena like individualism, rationalism, and fundamentalism.

Keywords Economic sociology · Comparative psychology · Cultural evolution · Institutions

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1 Introduction

Modernity as a psychological syndrome is a well-trod topic, with a variety of opinions as to, first of all, what it consists of, and second, what led to its peculiar dominance in the West as it modernized. Among the better-grounded recent accounts, Henrich et al. (2010); Henrich (2020) identify a constellation

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of psychological features he calls WEIRD, an acronym for Western, Educated, Industrialized, Rich, and Democratic. Henrich sketches WEIRDness as relatively

individualistic... nonconformist, and analytical... We [WEIRD people] aim to be “ourselves” across contexts and see inconsistencies in others as hypocrisy rather than flexibility... We see ourselves as unique beings, not as nodes in a social network... When reasoning, WEIRD people tend to look for universal categories and rules with which to organize the world... We simplify complex phenomena by breaking them down into discrete constituents... Paradoxically, and despite our strong individualism and self-obsession, WEIRD people tend to stick to impartial rules or principles and can be quite trusting, honest, fair, and cooperative toward strangers or anonymous others. In fact, relative to most populations, we WEIRD people show relatively less favoritism toward our friends, families, co-ethnics, and local communities than other populations do. We think nepotism is wrong, and fetishize abstract principles over context, practicality, relationships, and expediency. (p. 30)

Though Henrich et al. (2010) limit themselves to describing the syndrome, Henrich (2020) locates its ultimate origin in altered kin structures in Northern European society. However, numerous authors observe the same features in whole or in part, with a similar variety of origin stories. Weber (1956), perhaps most famously, points to bureaucracy as an organizational form that reflects and reinforces a rational and impersonal cognitive style. Johnson and Koyama (2019) take liberal sensibilities to be a spandrel created by increased state capacity. Many others have written of guilt vs. shame cultures, high-trust vs. low-trust societies, and other cultural moieties that – while not perfectly coextensive – do display strikingly similar temporal and geographic variation (Muthukrishna and Henrich 2021; Muthukrishna et al., 2020).

One comparatively neglected account of modern psychology, not necessarily at odds with any of the former, comes from Georg Simmel’s (1907) *The Philosophy of Money*, especially the fourth chapter on Individual Freedom. Simmel argues that monetary exchange took over the coordinating role of a number of previously economically essential institutions and “freed” them from material feedback, allowing them to evolve according to their own internal laws. Monetization has driven an increased “differentiation” in social life, not only in the basic sense of encouraging the division of labor as has been recognized since Adam Smith, but also in the sense that various domains of human social life are more clearly differentiated than in the premodern era. This is true both of differentiation within domains – for example, the proliferation of subcultures, or the very conception of aesthetic choices as an expression of authentic individuality – as well as between domains – for example, the modern conception of religion as something ideally independent of politics, or of ethics and law as separate questions. What I will call the Simmel hypothesis, locates the essence of modernity as a psychological syndrome in this differentiation, driven by money’s quality as a pure means (as opposed to an end in itself).

This paper interprets the Simmel hypothesis as a story of changing cultural-evolutionary constraints on the signals, norms, and institutions necessary

to organize the division of labor. The essential problem is that the division of labor – the gains from which constitute the human evolutionary niche – requires trust that costly effort on the part of any individual will be reciprocated. Historically, this trust has rested upon enforcement and exclusion mechanisms, coordinated with signals of cooperative intent such as ethnic, religious, or sartorial markers. Money is also just such a costly signal and a coordinating mechanism, a credible indication that one's own costly effort will be reciprocated (Harwick 2022). As such, it stands in for and largely obviates pre-monetary signals and markers, though only when property claims can be reliably enforced by an overarching institution such as a territorial state. Because the validity of pre-monetary signals was predicated on their noninstrumental use, however – that is, they were only credible if they were regarded as ends in themselves, rather than means to group cohesion or material provision – their replacement with a marker of *pure* instrumentality – namely, money – does not necessarily diminish the use of the original signals. Rather, their disconnection from the feedback provided by the mundane tasks of organizing the division of labor have led straightforwardly to the distinctive features of the modern Western mind, both its crowning achievements and its peculiar pathologies, including rationalism, individualism, and fundamentalism.

We will take pains to organize the *logical* problem of organizing the division of labor after the actual *historical* evolution of the ways human societies have done so, though without committing to a particular evolutionary timescale, monotonic growth in social complexity, or a uniform environment of evolutionary adaptedness.¹ While in principle “rational reconstructions” of any particular social institution are not constrained to follow actual historical evolution, the closer we can align them, showing why the historical development proceeded *this* way and not some other way, the surer we can be that we have focused on the key features, mechanisms, and constraints rather than something extraneous.² We will therefore build up the features of human psychology necessary to organize the division of labor in successive stages through personalistic groups, in a clientelist society, and finally introducing money on a mass scale and showing how it creates the conditions for the modern mind.

¹ The personalistic societies of the following section, for example, do not necessarily correspond to paleolithic societies, which likely varied widely in scale, complexity (Singh & Glowacki 2022), and the potential for ad hoc large-scale cooperation (Boyd & Richerson 2022). Nevertheless, any stage of supra-personalistic social complexity presumably follows a period of lower complexity *at some point* in the past, implying a solution of the problems raised in this paper. Regress, of course, is also possible following the loss of a coordinating technology (e.g., Harwick 2018).

² Examples of rational reconstructions of social phenomena that self-consciously do *not* follow historical development include Menger (1892), Buchanan and Tullock (1962), Rawls (1971). There is of course the opposite danger of historical overfitting; a “just-so story”. Rooting the elements of our story as firmly as possible in orthodox economic theory will be important to guard against this danger.

2 The evolution of the cultural division of labor

In the animal kingdom, what little ad hoc or permanent division of labor exists is typically stereotyped based on phenotypic divisions: most commonly by sex, but occasionally with finer divisions, as in the eusocial insects.³ Human division of labor, by contrast, is *cultural*, i.e., otherwise identical humans can specialize flexibly within a group. The fundamental premise of this paper is that *a structure is necessary for organizing this division of labor*, and different structures will entail different characteristic mindsets, which we can think of as equilibrium strategies. Dyadic exchange – the molecule of modern economic theory – is just one possible way to do so, one which allows the modern economist to overlook the peculiarity of the instrumental mindset idealized by *homo œconomicus*. However, the division of labor in the early human environment looked more like collective action than dyadic exchange. We will speak, therefore, of *gains from the division of labor* rather than the more specific ‘gains from trade’.

Besides the historical evidence, there are good theoretical reasons to prioritize collective action over exchange, rather than starting with a model of the latter (Harwick 2018). Most importantly, dyadic exchange – whether spot or time-separated, and whether between individuals or communities – presupposes relatively secure property claims; otherwise, there will be parties for whom predation provides higher payoffs than exchange. Greif (2000) calls this the “fundamental problem of exchange”. Indeed, non-stereotyped exchange is vanishingly rare among nonhuman animals for exactly this reason: however, great the benefits from exchange may be, specializing and revealing one’s endowments in order to trade will not be worthwhile without sufficient security from predation.

This security may arise from a natural asymmetry that favors the defender in conflicts over property, or from artifactual institutions that favor the defender and punish aggressors, but it is doubtful that such an asymmetry naturally exists between individuals, and we cannot assume well-functioning third-party definition and enforcement of property claims at this point without begging the question. If dyadic exchange requires a collectively organized defense against predation, whether external or internal, we must solve the collective action problem *before* we postulate dyadic exchange. We cannot, in other words, build up from a thought experiment with Crusoe and Friday:⁴ the division of labor – whatever form it takes – will require *trust*, that is, an expectation that others will reciprocate and refrain from predation, and a willingness to reciprocate and refrain from predation oneself.

Nor is it necessary at this point, once the necessary collective action is accounted for, to continue to dyadic exchange: achieving collective action in defense against

³ The division of labor between cells within a multicellular body is also governed by phenotypic divisions between cell types, with considerably more complexity than between organism types of a species: Kaufmann (1993: 461) estimates the human body has up to 300 distinct cell types, with more types requiring exponentially longer genomes.

⁴ For more on why parables of goods-exchange emerging out of anarchy do not work, see Harwick (2023a).

internal and external predation suffices to account for early human social structure and the gains from the division of labor that it was able to exploit. The locus of collective action, and of the division of labor, was for much of human history a small and relatively egalitarian band within which reciprocity and participation in collective action – both directly for material provision and external defense, and indirectly by punishing noncontributors in the material provision game (Yamagishi 1986) – are enforced by ongoing personal ties.

Even this limited division of labor poses a puzzle, however. Both theory and experiment suggest that, without perfect information and beyond a group size of about 5, collective action – even in a repeated game – will never be in the narrow interests of the individuals who are a part of it (Fehr and Gächter 2000; Bowles and Gintis 2011: 63–67). That is, if individuals pursue their own interests instrumentally as required by Nash equilibrium, cooperation cannot be sustained. Even organized punishment for non-contribution is ultimately no solution to the problem: while this can render cooperation a dominant strategy for those subject to punishment, the punishment itself is a collective action problem among the enforcers. This “incentive gap”⁵ in terms of individual utilities is an irreducible feature of social life.

Collective action can be *evolutionarily stable* even if it is not a Nash equilibrium,⁶ however, if there is selection between groups for those with more cooperative individuals, strong enough to outweigh the selection against cooperative individuals operating within groups (Sober and Wilson 1998). From the perspective of individuals in such groups, if their preferences are being shaped by selection at a level *other* than the individual level where preferences are held, group-oriented preferences must be experienced subjectively as *noninstrumental ends in themselves*, rather than being held for the conscious purpose of exploiting gains from the division of labor (Harwick 2020). If “enlightened self-interest” is not a bridge far enough to cross the incentive gap and sustain collective action, categorical imperatives – particularly ones that countermand self-interest at crucial points – might be (Alger and Weibull 2013). As Rappaport (1971) argues,

Through sanctification, the purposes of higher-order systems may be injected into lower-order systems. As such, sanctification operates as a counterthrust to attempts by individuals or social groups to promote their own purposes to positions of dominance in higher-level systems.

⁵ Harwick (2020) defines the Incentive Gap as “the impossibility in broad classes of social dilemmas of eliminating the incentive to defect among some subset of agents, whose defection would eventually lead to the total unraveling of cooperation.”

⁶ Evolutionary stability is a closely related refinement of Nash equilibrium where strategies are selected at the population level through differential reproduction, rather than by individuals through rational choice. While evolutionary stability is usually thought of as a narrower concept than Nash equilibrium (e.g., it will exclude “knife-edge” equilibria that are not robust to random noise), selection between groups can generate evolutionarily stable strategies which are not Nash equilibria for the individuals in those groups. See Okasha (2006) for a detailed defense of the meaningfulness of “selection between groups” and the conditions under which it would apply.

Indeed, the fact that cooperation is *not* a Nash equilibrium under these circumstances shows that group-oriented preferences *cannot* be held instrumentally, for the explicit purpose of individual material benefit. Whether in the material provision game or in the supervening punishment game that stabilizes cooperation in the material game, it will never be in individuals' narrow interests to cooperate unless their subjective preferences include ends *besides* their own individual material payoffs.

In order for individuals to be selected for who are impressible with group-oriented ends, it is necessary not only that such groups cohere internally for the purposes of collective action but also that they compete with one another *as relatively cohesive groups*, in order for selection between groups for those with members more strongly and noninstrumentally committed to their group to counterbalance the within-group selection *against* such individuals with noninstrumental ends. This does not necessarily involve direct conflict (Henrich and Muthukrishna 2021),⁷ though evidence does point to intense violent conflict in the early human environment (Choi and Bowles 2007). In either case, the equilibrium is not universalistic altruism, but *parochial* altruism (Choi and Bowles 2007; Bowles and Gintis 2011, Ch. 8), where group members have a noninstrumental preference for cooperation with an ingroup, but afford little moral standing to outgroups. The theoretical alternative to parochial altruism is not universalism, but – like most animals, most of the time – simple noncooperation.

In practice, therefore, these noninstrumental preferences will be tightly linked to participation in *ritual*, a costly and visible signal of an unobservable commitment to collective action within a particular group (Iannaccone 1992). The signal is informative because an individual with a noninstrumental preference for cooperation and loyalty to the group will participate in a ritual; someone lacking either one will find it overly burdensome. Thus, the strategy: *contribute to the collective good provided the benefits can be limited to ritual co-participants*.⁸ A community member who participates in (say) a burdensome religious ritual or a wasteful potlatch festival, signals his commitment to remaining enmeshed in a network of repeated dealings, where atomized or independent agents would not be able to trust one another in a collective action context. Importantly, as a costly signal, there is no necessity that the ritual itself be functionally geared toward cooperation: indeed, small-scale religious practice is oriented less toward the promotion of moral behavior than toward self-justifying ritual obligations (Baumard et al. 2015; Whitehouse et al. 2022). In practice, because the primary axes of ongoing division of labor in small-scale societies are by age and sex (Hooper et al. 2015), coming-of-age rituals, where a young individual is initiated into womanhood or (especially) manhood, are an important

⁷ Because at this point we are interested in the evolution of basic cultural capacity rather than the evolution of specific cultural forms, several of Henrich & Muthukrishna's proposed avenues of intergroup competition – prestige-based copying and differential migration – are not applicable, and may even hinder the evolution of basic cultural capacity to the extent they reduce genetic assortativity. Differential survival and differential reproduction of groups, however – even without direct conflict – will suffice.

⁸ The importance of metering benefits in the heuristics used to build up social exchange strategies is emphasized by Cosmides et al. (2010) in both dyadic and *n*-person exchange.

signal of trustworthiness in personalistic communities (see Gilmore 1991 for examples).

Thus, collective action within a personalistic community is achieved through a division of labor organized by a network of personal obligations, and vouchsafed by credible signals of buy-in to that ongoing multilateral obligation. And with collective action thus established, bilateral spot exchange *between groups* becomes possible in a way that it was not between individuals: where an individual defender of a property claim had no particular advantage over an aggressor, groups – especially settled groups, for geographic or other reasons – *do* frequently have a defensive advantage (Bó et al. 2020). Accordingly, regularized bilateral spot exchange *between groups* appears in the historical record long before bilateral spot exchange between individuals (Marwick 2003). Individuals, for their part, negotiate for their subsistence multilaterally within a group.

3 Division of labor in larger-scale societies

Personal ties are only a viable structure to organize the division of labor at a severely limited scale. As a community grows beyond the capacity of personal ties to maintain a sufficiently dense network, if it is prevented from fissioning (Bandy 2004), it will require internal structures; that is, *factions*: perhaps all united by a loose set of noninstrumental values, but organized internally by more substantive values.

These factions can originate either through internal cleavages in a growing society or through separate communities coming to overlap, and may split along a number of different fault lines, depending on the potential for trust and collective action. For example, cosmopolitan empires have often settled upon a division of labor by ethnicity. Ethnic diasporas and religious minorities prior to the modern era have frequently specialized into particular occupations. In guild systems, occupations as such organize themselves as permanent interest groups. Stratified societies frequently reserve certain occupations for certain castes or social classes. But whatever the axes along which the factions split, and whatever values they share with other factions in the broader society, because they continue to face the same collective action problems of the previous section, they will necessarily be organized – to a greater or lesser extent – around some kind of noninstrumental value.

Such a society coheres because the division of labor is organized by a hierarchy of overlapping and competing normative communities at a variety of different scales. Bear in mind that we are still assuming no third-party enforcement of property claims between groups, and rights within groups are enforced only by the collective action around the noninstrumental values that constitute the community. As North et al. (2009) emphasize, the various interest groups in such a society are kept together by the generation of rents – gains from the division of labor – which flow to groups *as such* and are distributed internally only after being apportioned to the group as a whole. They even call this situation the ‘natural state’ of political organization in societies too large to be organized entirely by personal ties. We will call it *clientelism*: a joint economic and political structure (for the two are hardly separate at this point) where the division of labor is organized by negotiations for economic

rents between groups, with individual rights defined and collective action occurring only *within* those groups, administered via overlapping personalistic hierarchies.

The fact that the distribution of rents among groups is settled and renegotiated with a background threat of intergroup conflict points to the importance of a collectively organized defensive advantage in conflict in making agreement on rights and privileges – and thus exchange – possible. Even when there has been a nominal central government, for example in most empires, on-the-ground governance is mostly left to these local groups, who interface with the central government *as* groups (Johnson and Koyama 2019), and hold the threat of collectively organized violence as a bargaining chip in negotiating the division of labor and (thus) the distribution of rents vis-à-vis other groups.

Furthermore, if the peaceful coexistence of various groups is ensured by the generation and distribution of rents, these rents can be most easily generated through a division of labor; by the monopolization by one group or another of certain productive opportunities. In other words, the surplus generated from the division of labor made possible by ceasing hostilities, can be enough to ensure peace among intermingling groups, even as those groups maintain their identities and the loyalties of their constituent individuals. Johnson and Koyama (2019, Ch. 12), for example, document a number of religious minorities across both time and space specializing in various trades: European Jews in moneylending, English Quakers in overseas trade, and displaced German Huguenots in skilled craft. Ethnic minorities, similarly, frequently specialize into narrow occupations: celebrated examples in economic history include the Maghribi traders in medieval Italy (Greif 1993) and Jewish diamond merchants in New York City (Richman 2006). Religion and ethnicity are natural axes of specialization due to their ability to command noninstrumental loyalty, but religious or ethnic majorities can specialize internally along additional axes, for example sex, social class, clan, geographical colocation, or even occupation as such.⁹ These various axes along which interest groups may form, and which organize collective action oriented around some noninstrumental value, we will call *domains* of life.

Regardless of the axis of differentiation, such groups must have internal enforcement mechanisms to ensure the buy-in and contribution from each member. In a clientelist environment, however, they must also have enforcement mechanisms on behalf of outsiders *against* members, for the purposes of external trade (Greif 2006). These mechanisms coevolve with and reinforce the place taken by the group in the division of labor. The Maghribi traders, for example, had specific enforcement mechanisms to prevent members from cheating outsiders with whom they frequently did business. The Jewish diamond merchants, similarly, have mechanisms to guard external trust from internal cheaters. This external trust is necessary in order for the group to benefit at all from monopolizing a certain market, and because different trades have different informational asymmetries and opportunities for exploitation,

⁹ Clientelist organization asserts itself in *any* social situation both (1) supra-personalistic, and (2) lacking external contract enforcement. In modern states, clientelist organization on this same model is most frequently seen in criminal organizations (Skarbak 2014; Norgaard and Harwick 2022).

these enforcement mechanisms will tend to be specialized to the group's trade. The group's reputation and the trust of outsiders, in other words, is a commons, protected by group-internal governance structures.¹⁰

Thus, overt group markers – for example, religious garb, physical ethnic features (e.g. Skarbek 2014, Ch. 4), linguistic shibboleths (François 2009), or signs of social class – take on a crucial significance: allowing any member in a society to know *who* can be trusted in *what* sort of trade, and specifically what group to appeal to for redress in the case of a dispute. These markers – though not necessarily costly in the sense of direct effort or expense – are nevertheless costly in the sense of precluding possible occupations monopolized by other groups. Being costly signals, they can serve as a partial surrogate for the more intense collective rituals of personalistic communities, and take on some degree of noninstrumental significance themselves. Many religious traditions require distinctive dress, for example, and sartorial and sumptuary laws limiting the acceptable dress and conspicuous consumption of various social classes, were common in medieval Europe and around the world. Groups will often police the use of their own visible markers to exclude nonmembers and prevent a depletion of the reputational commons,¹¹ but visible differences have also sometimes been imposed from without in cosmopolitan empires, for similar functional reasons. For example, the Fourth Lateran Council in 1215 declared (§68) that Jews and Muslims “of either sex, in every Christian province and at all times, are to be distinguished in public from other people by the character of their dress,” and similar regulations applied to Christians and Jews in the Ottoman empire.¹²

The fact that groups and factions must be organized around a noninstrumental value also shines light on the psychology of the individual under such a social structure. As Johnson and Koyama (2019) point out, “tolerance” in its modern liberal sense of a division between public and private commitments will be alien to him, though coexistence will of course be possible. So long as the burden of generating trust is placed on the collective action structures within these groups – trust which is necessary to generate gains from the division of labor – there can be no distinction between public and private commitments. Each individual in a society has an interest in knowing the normative commitments of each member, in order to know exactly what each can be trusted for, or in other words, what enforcement mechanisms he is enmeshed in. Similarly, in equilibrium, each individual will have an interest in honestly displaying his own normative commitments (McElreath et al. 2003).

¹⁰ This can operationalize the complementarity between social ties and production in Kerr and Mandorff's (2021) model of ethnic specialization.

¹¹ Greif (2006) notes that as it becomes more difficult for groups to exclude nonmembers from the use of their visible markers, the effectiveness of inter-group trade and specialization declines, which can either lead to a breakdown of exchange, or the development of centralized enforcement institutions and territorial law.

¹² Interestingly, a reorganization of sartorial laws was a key piece of Sultan Mahmud II's attempted rebalancing of Ottoman interest groups in 1829, particularly the establishment of distinctive dress for the administrative class (Quataert 1997).

Furthermore, these visible markers are *bearing the burden of economic coordination*. Each domain of life is functionally geared to economic necessity, even though from an “inside” perspective individuals regard the group’s values noninstrumentally, as valuable in itself irrespective of its economic effects. Thus, economic necessity *constrains the cultural evolution* of a group’s norms and values in a way that deliberate choice cannot, given the noninstrumentality of each group’s conscious goals: groups with values inconducive to the practical aspects of internal and external enforcement mechanisms will be unable to specialize into a rent-generating trade, and thus to survive as a distinctive group.

One specific psychological feature ruled out by this necessity is overly strict consistency. As Harwick and Kelly (2023) argue, the incentive gap problem means that the rigid application of any strategy or value can be invaded or exploited by some strategy in a collective action context. Thus “exceptions” in the Schmittian sense will be necessary, the application of discretionary compromise in situations where the rule or value is indeterminate or leads to perverse results. Weber (1956, §II.6.ii.7), for example, notes the necessity of well-placed compromises in the otherwise extraordinarily strict Hindu caste system (cf. also Aktor 2018: 225):

Of course, even in these matters [of taboos restricting the development of trade] there are natural limits to the power of religion in respect to the elementary needs of life. Thus, according to the Hindu caste taboo, “The hand of the artisan is always clean.”

Sperber (1975, Ch. 5) likewise notes that the Dorze of the Ethiopian highlands diligently keep watch against leopards on Orthodox fast days, indifferent to the practically dangerous but logically ironclad implication that, if (per their strongly held belief) leopards observe fast days, leopards should be harmless on those days (or the transposition that if leopards are indeed dangerous on fast days, then they are not Orthodox Christians). Noninstrumentality means that these exceptions were not rationally chosen, and are not adhered to now, with a view to economic necessity. Rather, intellectual consistency and the impulse to generalize are selected against as vices. The Dorze, in particular, simply feel no need to confront these two given truths with one another. One can easily imagine a Dorze or Hindu sect, in which consistency is more highly valued, failing to survive.

One can also see this selection process over time in what Weber (1956, Ch. 3, §12a) called ‘routinization’ (*Alltäglicdung*), the necessity for charismatically led groups to accommodate themselves to economic necessity within a generation of their founding. The radicalness of the early Christian Church was largely lost during its institutionalization in the late Roman empire, and the exacting moral standards of the Sermon on the Mount relegated to optional “counsels of perfection”. Usury restrictions were for all intents and purposes dead letter in both Christian and Islamic civilizations long before the advent of modern finance (Caton 2023; Munro 2003). Radically aniconic and morally stringent sects continued to arise and fizzle

out or be reabsorbed over the next millennium, until the Reformation.¹³ Mendenhall (1955), similarly, interprets the Old Testament as the record of a recurring clash between the aniconic purity of the Jewish prophets – a direct ideological ancestor of Reformation iconoclasm millennia later – and the inevitable pragmatic and corrupting exigencies of governance faced by the Jewish state.

This analysis provides an explanation for these failures deeper than simple corruption or persecution. Rather, any institutionalized religion – that is, one bearing the burden of holding together a widespread normative community – will be unable to take its own principles too strictly or literally, and will depend on pragmatic and inarticulable “blind spots”. A sect that relies too heavily on logical entailments from specific articulated values to justify its strategies will necessarily be vulnerable to exploitative strategies in its collective actions, and – like the mostly failed hippie communes of more recent memory – fail to survive as a distinctive community.

Finally, though an individual may be committed to multiple overlapping groups in various domains (for example, kin, religious, occupational, etc.), because each is oriented toward the provision of trust and enforcement mechanisms, it will be impossible to cleanly separate the various domains of life. Ethnic, national, and religious cleavages, for example, will tend to coincide, and will mutually reinforce one another in a structure of legitimacy. This is true not because the values held by groups in each domain are necessarily logically compatible or complementary – if this is not true of values within a domain, much less for values between domains! – but because they are being operated upon by the same selective forces. In terms of the explicit statements of its prophets and its sacred texts, for example, Christianity, like the Judaic prophetic tradition from which it descended, had strong anti-political commitments. However, although the Church was (unlike for Islam) always distinct from secular power in Europe, it did serve an unambiguously political role, and religion was intimately connected to the legitimacy of political authority. There was no clear distinction between religious and political domains – even if the distinction between religious and political *organizations* was maintained – because the same cultural-evolutionary constraints of economic necessity were operating on both.

To say that premodern thinking is “holistic” as opposed to analytical (Henrich 2020, Ch. 1), is simply to point to this lack of differentiation. Though different domains are all functionally oriented toward and constrained by economic necessity, they are done so through noninstrumental values, which means that a problem in any given domain cannot be considered in isolation from other domains without upsetting an equilibrium of rent distribution and division of labor between groups; nor can the question be approached directly in terms of means–ends rationality without vitiating the potential for collective action within any given group. Indeed, premodern peoples will often refuse even to follow basic syllogisms where this requires them to abstract away from concrete experience, where their Western-educated children do so with ease (Luria 1979).

¹³ Why the Reformation succeeded where previous aniconic movements had failed, will be suggested in the following sections.

While North et al. (2009) show in detail why clientelism is a viable way to organize a premodern society, the signaling story we have told shows why post-Neolithic division of labor has invariably been organized along interest group lines, rather than some other way, and also explains important psychological characteristics of such societies. It is not that occupational lines provide a convenient common interest for the organization of an interest group; rather, it is that interest groups organized around some *other* value provide a vehicle for organizing the division of labor, ensuring its incentive-compatibility and generating sufficient rents from it. If collective action is necessary in order to provide a sufficient defensive advantage in conflict to make property claims meaningful, then bilateral exchange *within* groups will be largely unnecessary, and bilateral exchange *between* individuals of different groups will be done with the background of respective group loyalties in mind.

4 Division of labor in monetized societies

Georg Simmel (1907) argued that monetization was a watershed moment in the creation of the modern mind. Money's status as a "pure means" – that is, the fact that in a well-developed money economy it is only desired for what it can purchase, and not as an end in itself¹⁴ – accustomed modern peoples to rational means–ends calculation and allowed various institutions and domains of life to differentiate "according to their own internal laws" and without extrinsic constraint. Though Simmel was more sociologist than economist or historian, Simmel's identification of the core of the modern psyche as rational calculation, as well as his story of differentiation through monetization, can be reconstructed more rigorously in light of the foregoing history of the organization of the division of labor.

In a clientelist society, visible signals of group membership have a dual purpose: first, a signal to insiders that the individual will cooperate in the group's collective action endeavors and participate in its internal governance, and second, a signal to outsiders that the individual is embedded in a group with enforcement mechanisms to ensure trustworthiness in particular occupations. Money, where it is used (and it is used very irregularly until the development of a mercantile class, despite being quite ancient in its basic form), is primarily exchanged with outsiders, and the property claims exchanged for money arise as an equilibrium *détente* between these groups, rather than through an authoritative legal register.

The situation changes when one unified group exists with both the power and the inclination to regularize and enforce property claims *between* other groups – that is, what we would recognize today as a territorial state. It is important to realize that this situation did not exist even within premodern "states" and empires, which were held together less by the authority of a central government and more by negotiation among factions. To use the terminology of Mann (1984), despite having a

¹⁴ Simmel (1907: 249) does discuss disordered attitudes to money as an end in itself, namely the miser (who values the holding of money for its own sake) and the spendthrift (who values the spending of money for its own sake), but these are marginal cases.

great deal of *despotic power* – the ability to impose their will within their ambit of power – premodern states had little *infrastructural power* by the standards of modern states – that is, a rather small ambit of influence. Where a central government existed – and it did not in many places for much of history – it maintained order through the enforcement mechanisms of other subsidiary domains such as religion, ethnicity, clan, sex, occupation, and so on, and depended on legitimation from them.

When property claims are unilaterally regularized *between* groups by a single overarching group imposing territorial law, by the standards of clientelist organization, two individuals of formerly separate groups are now functionally united in the *same* group by virtue of both being subject to the same enforcement mechanisms for redress. With sufficient security against predation *as an individual*, it becomes possible to use money for *self-enforcing spot exchange*¹⁵ (and the greatly expanded population of a large territorial group also makes it *necessary* to use money much more extensively than had previously been the case). Like visible signals of group membership, the use of money is a costly signal to the provider of a good or service that the provision will be reciprocated with something of commensurate value later, but by contrast with such signals, by an *indeterminate* third party (Harwick 2022). Money is a *substitute* for the kinds of group-internal enforcement mechanisms that made inter-group exchange possible, what Kocherlakota (1998) called “memory”, and territorial law substitutes for visible group markers in ensuring potential redress even in cases of asymmetric information. Provided property claims are widely acknowledged and enforced,¹⁶ money makes spot exchange *incentive compatible*.

The widespread use of money does not, of course, solve the ultimate incentive-compatibility problem: it merely transfers the burden to a higher level. The enforcement of property rights still requires collective action by a group specialized in enforcement and organized around a noninstrumental value. However, in this configuration, the collective action of such a group with a territorial monopoly on enforcement – a state – “transform[s] would-be *N*-person social dilemmas into solvable dyadic interactions” from the perspective of individuals in subsidiary groups (Harwick 2020).

Money then, under a regime of secure property rights, organizes the division of labor, something noted by Adam Smith (1776: bk. 1, Chs. 1–3) at the dawn of the modern era as a number of mutually reinforcing developments were occurring for the first time: (1) The British state was consolidating its administrative control over subsidiary groups and factions, and, more specifically, Parliament as a faction within the state consolidated its administrative control over the state itself, (2) money was coming to be used as a general medium of exchange as local markets became integrated across the country and autarkic manor economies fell defunct, and (3) the division of labor was becoming increasingly intricate, driven by the increase in

¹⁵ Interestingly, the prior use of money by mercantile classes does seem to have taken place mostly in settings where overarching inter-group enforcement mechanisms had evolved. See e.g., Milgrom et al (1990) on the medieval Law Merchant.

¹⁶ This cannot, of course, be taken for granted, as the previous section shows. Nevertheless, the origin of this kind of enforcement (on which see Harwick and Root 2020) is outside the scope of this paper: here we are more interested in its effects than its causes.

the size of the market. But by organizing the division of labor, money also thereby *relieves the subsidiary groups of the necessity of doing so*. On the one hand, without a need for group-internal enforcement mechanisms, at least not to the same degree,¹⁷ the division of labor need no longer be organized along group lines, and can therefore be made much more intricate. A great deal of latent economic potential was unlocked by making it possible for *individuals*, rather than groups, to specialize according to a comparative advantage.

Simmel's characterization of money as a "pure means" points to the difference between monetary exchange under a secure property regime, and impersonal exchange without such an overarching regime. In the latter case, to repeat, because collective action and enforcement in large groups is not incentive-compatible, the costly signals used to coordinate that collective action must be regarded as ends in themselves, though ends with large practical blind spots. On the other hand, because money stands in as a costly signal and makes cooperation in exchange incentive-compatible, *it is possible to employ money instrumentally* in a way that it is *not* possible to employ intra-group ritual.

Thus, the deliberate means–ends rationality that Weber and Simmel both identify as the peculiar feature of the modern mind, can be understood as having been made possible by the replacement of an incentive-incompatible collective action game, where a divergence between subjective payoffs and objective payoffs is maintained by selection at the group level for individually irrational preferences, with an incentive-compatible spot exchange game, where the burden of the incentive gap is assumed by a territorial state, allowing subjective payoffs to align with the objective payoffs. This alignment between payoffs and preferences, indeed, is the hallmark of economic rationality (Harwick 2020).

The ascendancy of monetary exchange as the primary organizational tool for the division of labor entails a reduction of the "moral burden" on most people;¹⁸ that is, the extent to which they must make choices contrary to their objective material interests in order to continue reaping the gains from the division of labor. Thus, rationalism – both economic and scientific – becomes possible: the former because spot exchange is now incentive-compatible within its ambit, and the latter because the economic benefits of a scientific means–ends approach to factual questions now outweigh the costs of discoordination in an incentive-incompatible exchange game. Rationalism, therefore – in any domain – should be understood as the spread of instrumental logic into domains previously coordinated by groups organized around noninstrumental ends. Instrumental logic has a natural advantage in any domain characterized by an incentive-compatible game: there is no need to bear a moral burden when the Pareto optimal outcome is a Nash equilibrium; no need to suppress a direct instrumental interest in the objective material payoffs.

¹⁷ Particularly severe information asymmetries may still make a division of labor along group lines efficient even today, especially where state enforcement is unwieldy, unreliable, or unwanted (e.g., Richman 2006). It should be noted however that one vital function of money is to eliminate information asymmetries on at least one side of the transaction (Alchian 1977).

¹⁸ Though not on everyone, particularly in the enforcing group, which must still organize collective action for enforcement of property claims upon subsidiary groups.

5 Differentiation and the modern moral mind

It would be a mistake, however, to characterize modern morality as purely means–ends oriented. Indeed, in many important ways, modern humans are *less* means–ends oriented than their premodern forebears. In addition to the rationalization pointed to by Weber, Simmel characterizes the modern moral mind by *differentiation* among domains of life. In particular, the domain of economic necessity that previously ran through and anchored each separate domain, now constitutes an independent “economic” domain where explicit means–ends logic is permissible and even encouraged. This new domain, however, becomes not only differentiated, but *walled off* from other domains, in a way that would have struck premoderns as peculiar. And *this* differentiation, in addition to the rationalization that money made possible, is the key to the difference between modern and premodern moral sensibilities.

Muthukrishna and Henrich (2021) observe that “social norms persist after the conditions that created them have dissolved”, and the evolved noninstrumentality of Section 1 is a powerful reason why. Because the values around which these groups cohered are held for their own sake, the reduction of the moral burden on them does not eliminate the groups’ *raison d’être* from the perspective of the members’ subjective values, even though there is no longer any objective *economic* necessity for them. Accordingly, the groups do not vanish, at least not uniformly, as a secularization story might have it. Rather, Simmel’s argument that previously interlinked domains of life begin to differentiate and “evolve according to their own internal laws” means that the cultural-evolutionary constraints on noninstrumental group values have changed. No longer constrained by the necessity to generate economic rents, aniconic, ascetic, and a ritualistic groups become viable in a way that they were not in a sparsely monetized society. It was not just the printing press that made the Reformation viable where previous iconoclastic sects had failed or been coopted; it was the increasing monetization of the European economy that made a stringent and relatively iconoclastic exegesis possible (and even so, the even more stringently aniconic Anabaptist sects continued to be persecuted). Indeed, the self-consistent rationalistic ethics of ascetic religions have always found the most fertile ground in highly monetized urban centers, and in particular among the bourgeois strata most enmeshed in the money economy (Weber 1956, §II.6.v.4).¹⁹

Thus, in a variety of domains the loosening of the economic constraint on group values leads to their intensification, not their decay. Where economic necessity previously made it necessary to permit large practical blind spots as to the entailments of particular explicitly held values, we are now free to take these values much more seriously and literally on their own terms and purge the blind spots. Art, for

¹⁹ To the extent that moralizing religions (as opposed to the pure costly signal rituals of Section 1) are an expression of rationalization in the Simmel/Weber sense, Baumard et al. (2015) suggests that economic affluence (corresponding to monetization) is the direct causal factor as opposed to political complexity or state capacity. The present paper fills in “the proximate mechanisms by which affluence leads to the emergence of new kinds of religions.”

example, no longer tasked with buttressing political legitimacy, has evolved into much more abstract forms with no clear relation to aesthetic sensibility, maximizing instead values internal to the artistic community. In religion, fundamentalism becomes increasingly viable, with deliberate means–ends logic used to construct a self-consistent worldview in service of a noninstrumental value. And indeed, fundamentalist revivals occurred in all of the major world religions over the course of the 20th century as mercantile values penetrated the world. In politics, liberal states are held together by a noninstrumental value of procedural legitimacy, a value that makes us far more averse to what would today be called corruption – *even* (to some extent) *by those who might benefit from it* – but in the past was simply the normal functioning of clientelist negotiation.

This latitude to take a group’s noninstrumental organizing value more seriously, also entails *differentiation*, both within and between domains. An analogy to biological evolution can clarify the process – and indeed, the basic process of Simmelian differentiation applies whether the replicator is a gene or a cultural variant. Imagine a population with a distribution of genotypes. In an environment that constrains expression to a single phenotype, there will be no selection on the genotype, which can drift neutrally among variants. If, however, this environmental constraint is removed, phenotypic expression will differentiate according to the underlying genotype, the organism’s “internal laws” of development. Such a process can help explain why, for example, there are more axes of personality differentiation in modern than in forager societies (Lukaszewski et al. 2017), or that gender differences in preferences and personality are greatest in countries with the most legal equality (Falk and Hermle 2018).

Similarly in cultural evolution, an institution’s “genotype” can be thought of as the explicit values around which a community coalesces (Muthukrishna et al. 2020). But to the extent that the institution is constrained by a clientelist environment to generate rents for survival, its phenotype – that is, its de facto internal and external enforcement mechanisms – will bear certain features regardless of – or even in opposition to – its stated values. When this constraint is removed by the availability of widespread monetary exchange, however, previously latent values have practical avenues for expression.

In religion, for example, witness the fracturing of denominations made possible after the Reformation. Because such groups can be largely self-justifying now, there is little size constraint, either from above or below; doctrinal purity can trump economic necessity. Religion becomes (or at least, can become) a matter of private conviction and belief rather than public participation in ritual. Thus, an ethic of tolerance in its modern sense – a division between private and public commitments – becomes possible only in a fully monetized society.

Simmel, similarly, points to the existence of *fashion* as a particularly modern phenomenon. With the division of labor no longer necessarily tied to social class, and therefore outward class distinctions now being unnecessary to enforce, means–ends rationality now frequently grounds aesthetic choices in an ethic of authenticity. I dress the way I do, not in order to signal my subjection to the enforcement of an external community, but in order to express some internal facet of individuality (and indeed, authenticity is closely related to the aniconism and aritualism that we have

argued money also make possible: see e.g., Keane 2002). Individual choice in the expression of visual signals, along with more fluid group affiliation, become possible precisely because these signals are no longer bearing the burden of organizing the division of labor.

This luxury to take our noninstrumental values more seriously, to fully explore their logical entailments using explicit means–ends logic, also manifests as a particular sort of purity; a strict *aversion* to the application of means–ends rationality to certain domains. As Simmel (1907) argues, in a well-developed money economy “money’s capacity to reduce the highest as well as the lowest values equally to one value form [places] them on the same level, regardless of their diverse kinds and amounts” (p. 257), and “the precise expressibility of [previously incommensurable sacred values’] monetary value [robs] them of their existing individual significance” (p. 242) as ends-in-themselves.

This concern with money as normative acid (Maurer 2006) is familiar in much anthropology of money, from Marx through Polanyi and Sahlins, who argue that our comfort with economic calculation contrasts with the anti-commercial sensibilities of premoderns. In fact, this is nearly the opposite of the case. Despite the fact that money shoulders much of the economic coordination in the modern era, we feel *much more strongly than did premoderns* that money should not touch sacred values; that to involve them in exchange would be to profane them. Indeed, Bloch (1989) argues that many supposed examples in anthropology of aversion to money or commerce in traditional societies are a projection of modern attitudes and in fact reflect values quite orthogonal to money or commerce as such: in premodern societies, “exchange does not have the same central symbolical place” as it does for moderns.

In justice, for example, we feel that monetary fines for murder are inappropriate, as it raises the specter of a wealthy individual deciding that he can afford a murder. For the ancients, however, a monetary fine for murder was quite normal, in law codes and practices all the way from Hammurabi’s code to the ancient German practice of *Wergeld*, both of which lay out a schedule of monetary fines for crimes up to and including murder. In a clientelist society, money simply does not carry the taint of rational calculation as it does for us today.

In love, we feel today that romantic love should be self-justifying and noninstrumental. We celebrate stories of marriage across ethnic or class lines. Whereas in a clientelist society, when kin ties are cemented and familial alliances made through marriage, and the division of labor is organized along kin lines, dowries and bride prices are common: not that love plays no role, but it is not so differentiated from domains of economic necessity as it is for the moderns (Simmel 1907: 383). Bau-mard et al. (2022), for example, show that the prominence of romantic love in literature is closely linked with economic development (and by proxy, monetization) across all world cultures.

The clearest and most numerous examples of the contrast, however, can be found in the domain of religion. In traditional societies from Melanesia (Armstrong 1924) to Nigeria (Bohannan 1955), for example, there exist a variety of media of exchange with circumscribed domains of fungibility and whose exchange carries ritual significance. By contrast, we feel that to exchange religious experience for money (ours having near-universal fungibility) would cheapen the former; to reduce it to a means

rather than an end in itself. Jesus' anger at the moneychangers in the temple (Matthew 21:12-17) appears quite natural to us in the modern era, but the role of money in sacrificial ritual would have been commonplace and unobjectionable at the time. The principle in Roman religion of *do ut des* ("I give that you may give") points to an unobjectionable transactional quality shared to a greater or lesser extent by all premodern religious practice. Even in medieval Europe, the line between offering and transaction was hardly unambiguous, with penance for sin carrying definite monetary prices at times (Gullbekk 2019), until the Reformation reaction against indulgences.

Similarly in a variety of professions, the luxury to have a consistent and principled unconcern with economic necessity, to purge the blind spots of the previous section, is only possible – economically and (therefore) morally – in a well-developed money economy:

Those professional classes whose productivity lies outside the economy proper have emerged only in the money economy – those concerned with specific intellectual activity such as teachers and literary people, artists and physicians, scholars, and state officials. As long as a barter economy prevails there are only very few of them and then mostly on the basis of substantial land ownership. (Simmel 1907: 312)

Today, sacralization is frequently used to remove domains of life, and the professions that administer them, from the realm of economic calculation and means–ends rationality, something that would have been impossible – or at any rate suicidal – in a less differentiated economy. The rhetoric surrounding healthcare, education, or housing policy, for example – that they are *rights* – frequently aims at just such a sacralization, in order to preserve and legitimize an otherwise inefficient flow of rents.

6 Conclusion

Scientific rationalism is commonly accepted as a hallmark of WEIRD psychology, but its exact contours, and its ultimate origin, have been the subject of a wide variety of speculations. We have interpreted Georg Simmel's sociological account as a cultural-evolutionary story of changing constraints on norms and institutions, with moral sensibilities and psychological predilections responding to a reduced moral burden on the institutions that previously organized the division of labor.

This process of differentiation, of course, is not – and probably could not conceivably be – total. Beneath our historically anomalous affluence there still remains the brute economic fact of scarcity, which still constrains the expressions of values in various domains of life – though, certainly, more loosely than in the past. Nor is it one-dimensional. Little has been said about the *specific content* of the differentiating norms and values. Thus, Simmelian differentiation implies that modernizing societies have the potential to be more differentiated from each other in terms of explicit values than they are from premodern societies. Nevertheless, they are united

in certain basic psychological features of monetized modernity that allow for the *possibility* of differentiation.

To say that moderns are more analytical, for example, points to the fact that the domains of human social life are more functionally differentiated now, allowing problems to be approached via their constituent aspects rather than holistically. To call them individualistic points to a reduced moral burden, which allows them to regard outward signals instrumentally, as expressions of individual preference, rather than as coordinating signals of noninstrumental values. The locus of economic provision is much more individualized and dyadic than in the past. This differentiation, the “freeing” of various domains from economic necessity, has made possible a number of the crowning achievements of the modern world. The application of means–ends rationality to the natural world, the luxury of taking a commitment to literal truth seriously, has made possible an unprecedented scientific and technological revolution. And the reorganization of the division of labor around dyadic exchange rather than group-internal collective action mechanisms has unleashed a staggering explosion of economic growth over the past several hundred years.

At the same time, the disasters of modernity can be traced straightforwardly to the same predilections. Unconstrained by economic necessity, fundamentalism – whether religious, nationalistic, or ideological – can become locked into a piety contest dynamic, where the primary cultural-evolutionary force becomes runaway selection on the most extreme interpretation of a sacred value. Many of the wars, mass murders, and genocides of the 20th century – at scales far beyond anything possible in the premodern era – were a direct result of such a dynamic.

On the other hand, if ritual participation is necessary for the healthy development of the human mind, the ability to provide for oneself economically without such participation – again, a possibility mostly unknown to the premoderns – will increase the incidence of anomie, undersocialization, and other afflictions of modern, and especially urban, life (Putnam 2000). Finally, if modernity as a psychological syndrome is partially heritable, it may select against itself by separating the domain of childrearing from the domain of economic necessity, making it subjectively superfluous (Harwick 2023b). Indeed, the demographic transition is closely linked to psychological modernity, and birthrates continue to plummet both in the developed and the developing worlds.

Only a few hundred years into the modern era, we are still in uncharted territory, especially entering what has been called a “crisis of modernity”. The achievements of the modern mind – scientific rationalism, individual liberty, and economic growth – are worth celebrating, and preserving. This account of their origins highlights the dangers they must confront; destructive outgrowths of the very same tendencies that made the modern world possible. In particular, the noninstrumental values buttressing the liberal state – procedural legitimacy, formal equality, and a tolerance for substantive inequality – must be reinforced *for their own sake* and not instrumentally as a means to economic growth. If they are treated as mere means – as many policy-oriented economists are wont to make them – defection against them is still the Nash equilibrium for any given faction, which can secure a larger share of benefits and status to itself at the expense of the broader social body. Such a society, to which the rise of identity politics is rapidly hurtling us, must eventually collapse back into a

clientelist mode of organization unable to sustain either modern economic growth or individual liberty. *That*, ultimately, is the crisis of modernity to which its partisans must rise.

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