

Optimization Theory and Rationality in Intimate Relations

On the Limits of Optimization as a Law of the Universe

There are goods a love does not maximize, and it is not for want of a better measure.

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有价值不生于度量，
权之，则已失其所是。

*There are goods that do not arise from measure,
and to weigh them is already to have mistaken
what kind of thing they are.*

能权万物之权，未尝有也。

*The scale that would weigh all things
has never been.*

— the author

致她——

For her—

那个属于森林的女孩，

the girl who belongs to the forest,

我从未计算过值不值得，

whom I have never once weighed for whether she was worth it,

因为那从来不是一个可以计算的问题。

because that was never a question one could compute.

致我最爱的人。 To the one I love most.

Abstract

This paper argues that optimization is not a law of the universe, and that morality and the manner of being of intimate relation are not, in their structure, optimization problems. It proceeds in two movements that it is careful to keep apart. The first is a formal proof, carrying no value judgment, that intimate relation furnishes no well-defined optimization problem: the value at stake is in part non-structurable, since the drive, which any complete objective must include, resists representation as a term; it is relational, generated within the relation and existing only there, so that no external standpoint could fix the objective; it is incommensurable, so that to price certain goods is to betray rather than mismeasure them; and the subject is constituted within the relation rather than given before it, so that the optimizer the model presupposes is a product of the process it is meant to stand outside of. Each failure strikes a distinct precondition, and any one leaves the operation of maximization undefined.

The second movement takes that result as given and criticizes the imposition of the frame regardless. To optimize where no optimization problem exists converts a value that should circulate into one that can be settled and drawn off, in the manner the theory of generative justice names as extractive computation; it is a symptom of the crisis of the symbolic and of a life-world habituated to the logic of capital, under which a local, historical operation is projected onto the cosmos as its law; and it mistakes the kind of thing morality is, since an optimizing practice, even a successful one, may fail as an ethics, the optimal and the good being orthogonal. The paper then recovers a rationality that responds rather than maximizes, described through response, attunement, and the sustaining of generation, and it closes in polyphony, refusing to name a new master objective, since to do so would reinstate the frame. That refusal is the paper's positive claim, enacted in its form.

Keywords: optimization; incommensurability; relational value; generative justice.

AI usage statement: AI assistants were used for drafting and discussion. The claims and the theoretical framework are the author's own, and the author takes full responsibility for the content.

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Part One The Problem: Optimization as a Worldview

1. Introduction: An Operation Mistaken for a Law

A question can be so widely presupposed that it is never asked, and the presupposition of this paper is one of these. In the ordinary speech of the present, a certain family of words recurs with the confidence of the self-evident. One speaks of the *optimal* choice, of the *efficient* arrangement, of whether a thing was *worth it*, of getting the *most* out of a day, a career, a marriage. The words are not idle. They carry a picture, and the picture has hardened, over the century in which it became the native tongue of economics, management, and much of the science of decision, into something close to a metaphysics. On this picture there is, for any situation in which one might act, a quantity to be made as large as possible; the situations of a life are so many landscapes, and to live well is to climb them; and the good, wherever it is found, is whatever sits at the summit. The picture is so pervasive that its central operation, the taking of a maximum, has ceased to look like one operation among others with a domain of its own and has come to look like the form of rationality as such, and beyond that, dimly, like the form of things. This paper is about that hardening, and its guiding claim is a denial: that optimization is not a law of the universe, and that morality and the manner of being of intimate relation are not, in their structure, optimization problems at all.

The denial is easy to state and easy to mistake. It is not the pious complaint that one *ought not* to optimize love, that to do so is cold or unromantic. Such a complaint concedes the very thing in dispute, for it grants that an optimization problem is there to be solved and merely asks that we refrain from solving it, out of tact. The claim of this paper is stronger and colder than that. It is that in intimate relation there is, in the strict sense, no well-defined optimization problem to refrain from: that the operation of maximization, applied here, does not have a hard solution one declines to compute but has no legitimate solution to compute at all, because the conditions under which such an operation is defined are not, in this domain, satisfied. The economist who hears the complaint has a ready reply: that love resists optimization only because our utility function is not yet fully written, and that the remedy is a richer function, one with intimacy and meaning and the long horizon folded in. The reply is powerful and must be met on its own ground. The burden of the paper's central part is to show that it fails, that the trouble is not a function written too poorly but the impossibility, for reasons given in their place, of there being a function to write.

The origin of the question, and its stakes

The question that organizes the paper arrived from without, in the course of an exchange on the political economy of value and the theory of generative justice, and it arrived in a form so simple that it took some time to feel its weight: whether optimization really is a law of the universe. The interlocutor's own framework had long resisted the reduction of heterogeneous

value to a single settling scale, and the question was in that sense already implicit in it; but stated baldly it did a particular work. It moved optimization from the place of an obvious and unexamined procedure to the place of a metaphysical thesis, which is to say a thesis that might be false. Once it is seen as a thesis, one can ask what it asserts and whether it is true, and the asking is the whole of this paper. The stakes are not confined to intimacy. If the argument holds, then a picture that governs a great deal of contemporary reasoning about how to live is shown to rest, at least in one central region, on a category mistake; and intimate relation, which the series has taken throughout as the minimal and most exposed unit of relational being, is the region in which the mistake is most legible, because it is there that the goods which resist the picture are least disguised.

Two movements, kept deliberately apart

The paper's argument falls into two movements which it is essential not to confuse, and much of the force of the whole depends on holding them apart. The first movement is a proof, and it is internal and formal. It asks whether the intimate relation furnishes a well-defined optimization problem, and it answers, in four steps, that it does not; and it does this, deliberately, *without any appeal to value*. It does not say that optimizing is bad. It says only that the operation is here undefined: that there is nothing of the required shape for the operation to act upon. One may read the whole of the second part of this paper as an atheist would read a proof that a certain equation has no solution over the reals, with no moral coloring at all, and the argument should be able to compel a reader who feels no particular reverence for love and merely wishes his formalisms to be well posed.

The second movement is a criticism, and it is external and normative. It takes the result of the first as given, that here there is no optimization problem, and it asks what follows when the picture is imposed regardless, when a domain that furnishes no well-defined maximization is treated as though it did. Here, and only here, do the value-laden claims enter: that the imposition damages what it touches, converting a generative circulation into an extractable and exhaustible quantity; that it is a symptom of a particular historical condition rather than a timeless truth; and that it mistakes the kind of thing morality is. The order matters. The proof clears the ground by showing that the frame does not fit; the criticism then examines the cost of forcing it on. To run them together, to argue at once that optimization is undefined and that it is wicked, would weaken both, for it would let the reader suspect that the formal claim is only the moral distaste in disguise. It is not, and the separation is the guarantee.

Three lines, and the shape of the recovery

Three lines run through the argument, as they have run through the series, and naming them here lets their recurrence read as design. The first is *psychoanalytic*: that among the goods any complete objective would have to weigh is the drive, and that the drive, arising at a coupling of the Real and the Symbolic, is precisely what cannot be fully written down, so that the non-structurability of value is not a limitation of our present formalisms but a feature of the thing [7]. The second is the line of *relational ontology and the vacancy of the big Other*, developed across

the series and stated most sharply in the papers on the non-binding vow and on relational estrangement: that value is not a property held inside a subject but is generated within a relation and exists only there, so that there is no position outside the relation, no omniscient third, from which its value could be read off and fixed [21]. This line does the heaviest work, for it supplies the reason the objective must be endogenous, and it ties the whole to the series' recurring insistence that there is no metalanguage and no big Other to occupy the God's-eye view that quantification silently requires. The third is the line of *generative justice and political economy*, developed in exchange with Eglash: that value which should circulate and return to those who generate it can instead be settled and drawn off, and that the imposition of an optimizing frame is one of the forms this extraction takes [3].

These lines converge on a recovery, for the paper does not end in denial. Having argued that rationality is not optimization, it owes an account of what relational rationality then is, and it offers one: a rationality of response, of attunement, and of the sustaining of a generation, which has its own severity and is not the severity of the maximum. But the recovery is held, in the manner the series demands, short of the temptation that would undo it. It would be easy, and it would be a defeat, to answer the question "what should one optimize, if not utility?" with "love, then, or meaning, or generativity," for that answer keeps the frame and merely repaints the summit. The paper refuses it. Its positive claim is that relational rationality is plural and admits no synthesis into a single measure, and that the refusal to name one master objective is not an evasion but the content of the view, enacted, as the series enacts its claims, in the polyphonic form of its own close.

2. The Formal Anatomy of an Optimization Problem

Before one can show that intimate relation furnishes no well-defined optimization problem, one must be exact about what a well-defined optimization problem requires, and the exactness is not pedantry but the whole condition of the argument's force. The four impossibilities of the paper's central part are, each of them, the failure of one of the conditions set out here; if the conditions are stated loosely, the failures can be dodged, and if they are stated in a caricatured form the whole refutation is a straw man. The aim of this section is therefore to state, without polemic and in a form a theorist of decision would himself accept, precisely what has to be in place for the operation of maximization to denote anything at all. The section grants optimization its strongest and most respectable version, so that when the later parts withdraw the conditions one by one, they withdraw them from a construction the optimizer recognizes as his own and not from a parody built to be knocked down.

An optimization problem, in its canonical form, is the search for an element of a set that makes a function as large as possible. Written out, it is the expression

$$x^* = \arg \max_{x \in \mathcal{X}} J(x),$$

and the compactness of the notation hides four presuppositions, each of which must hold for

the expression to pick out anything. There is a *feasible set* $\mathcal{X}$, the space of available options, which must be given in advance and be well defined, so that it is determinate what is and is not a candidate. And there is an *objective function* J , which assigns to each candidate a value; and it is in the conditions on J that the presuppositions grow heavy. For the expression to denote, J must be *representationally complete*, defined over terms into which every value at stake has been written, since a value absent from J is a value the maximization cannot see. It must be *exogenous and fixed*, given prior to the search and unchanged by it, for a function that drifts while one climbs offers no summit one can reach and keep. It must be *scalar*, or valued in an ordering rich enough that maxima exist, since $\arg \max$ over values that do not all compare has nothing determinate to return. And behind all three there must be an *optimizer*: a subject whose objective J is, whose preferences it encodes, presupposed to stand outside the problem, prior to it and stable through it, as the one for whom x^* is best.

The four presuppositions, named in the order of their denial

It is worth naming these four in the order the paper will deny them, since the order is a descent from the surface of the problem to its ground, from whether the problem can be *written* to who is doing the *writing*, and each later condition presupposes the earlier ones already met.

The first presupposition is *representational completeness*: that every value at stake can be set down as a term in J . This is the condition that the problem can be stated at all, logically prior to every other, for a value that cannot enter J is not priced badly within the optimization but excluded from its statement, beyond the reach of any adjustment of the function. The first impossibility denies this.

The second is *exogeneity and fixity*: that the objective is given before the process and unaltered by it, a determinate target rather than a moving one. This is the condition an endogenous, self-revising objective violates, and the second impossibility denies it, not as a contingent fact about people whose tastes happen to wander but on the ontological ground that value in relation is generated within the relation and admits no external position from which it could be fixed.

The third is *scalarity*: that the values J assigns lie on a common scale, so that any two candidates compare and $\arg \max$ has something to select. This is the condition incommensurable goods violate, and the third impossibility denies it.

The fourth is the *stable optimizer*: a subject with settled preferences standing outside the problem, whose objective J is and for whom its maximum is best. This is the condition a subject constituted within the very relation being optimized violates, and the fourth impossibility denies it, dissolving the fixed referent of the “who” the whole construction silently presupposes.

An instrument granted its proper domain

It clears the ground to see the four conditions holding somewhere, for the paper does not claim that optimization is everywhere ill-posed, only that it is so in a particular and important region, and the contrast is sharper if the well-posed case is granted its due. Consider a shipping

company routing a fleet to minimize fuel cost. The feasible set is the routes the vehicles can take, well defined by the road network; the objective is fuel burned, representationally complete because fuel is the whole of what is being weighed and nothing relevant is left outside it; exogenous and fixed, since the price of fuel and the shape of the network do not shift because the planner is planning; scalar, since fuel is measured in one unit along which more and less are always defined; and owned by a stable optimizer, the firm, whose objective this determinately is and who is not remade by the routing. Here optimization is not merely legitimate but the only serious way to proceed, and the paper affirms this without reservation. The four conditions are jointly met, the operation is well defined, and to decline it would be a failure of reason and not a fidelity to anything. The example matters precisely because it is so clean: it shows that the paper's quarrel is not with optimization but with its transposition into a domain where, as the next part argues, not one of these four conditions survives.

The demand that the anatomy be granted in full

The strategy of the argument requires that this anatomy be granted in its full strength, and the reason is worth stating, because it marks off the paper's claim from a familiar and much weaker one with which it would otherwise be confused. The weaker claim holds that optimization problems in human affairs are merely *hard*: that the feasible set is too vast to search, the objective too costly to evaluate, the information too poor, so that we fall back of necessity on rules of thumb and on stopping when a candidate is good enough rather than best [17]. This is the objection from bounded rationality, and it is true and important, and it is not this paper's objection; indeed it concedes exactly what this paper denies. To satisfy because the true optimum is out of computational reach is to grant that a true optimum exists, well defined but unreachable, and merely to humble our access to it; the metaphysics of optimization is left standing, and only our finitude is confessed. Even the theory of choice under uncertainty, which replaces the known objective with an expectation over states, preserves the four conditions intact and simply integrates J against a probability, so that the agent maximizes expected rather than certain utility and the whole apparatus, with its complete, fixed, scalar objective and its stable subject, is carried over undisturbed [16]. The paper's claim reaches beneath all of this. It is not that the problem is well-posed and hard, nor that it is well-posed and risky, but that it is not well-posed at all, that one or more of the four conditions fails in kind and not in degree. To establish that, one must take optimization at its strongest, grant it a searcher of unlimited power and perfect information facing no uncertainty whatever, and show that even for such a searcher the problem does not exist, because the representationally complete, exogenous, fixed, scalar objective belonging to a stable subject that the operation requires is, in intimate relation, not there to be operated on. The anatomy is set out in full so that the denials, when they come, cannot be answered by the reply that a faster computer or a more patient economist would have found the maximum after all. There is, the next part argues, no maximum there to be found, and no faster computer reaches what was never posed.

3. The Genealogy of Optimizationism

The picture criticized here was not always a picture of everything, and recovering the outline of how it became one is not idle history but part of the argument. A thesis that presents itself as the timeless form of reason draws much of its authority from seeming to have no alternative and no origin, to be simply how thinking goes; and that authority is loosened, though not refuted, once the thesis is shown to have been assembled, step by step, out of choices that could have been made otherwise. The point of the genealogy is therefore not to refute optimizationism by naming its birthday, which would be the genetic fallacy, but to change its standing: to move the claim that optimization is the form of things out of the register of self-evident truth, where it defends itself by seeming to have always been there, and into the register of historical construction, where one can ask what was assumed at each step and whether the assumptions hold. Three moments mark the passage from a local operation to a picture of the world, and at each a commitment enters that the later parts will have to test.

From purposive action to the calculus of means

The first moment is the isolation, within the theory of action, of a specifically instrumental rationality. Weber's typology distinguishes the rationality of ends, *Wertrationalität*, oriented to a value held for its own sake, from the rationality of means, *Zweckrationalität*, which takes an end as given and concerns itself with the efficient fitting of means to it [24]. The distinction is analytic, and in Weber it carries no triumph; he watched the advance of means-rationality with foreboding, as the closing of an iron cage around a disenchanted world. But the distinction did a lasting and double-edged work. By carving out a domain in which reason operates on means alone, with the end bracketed as given from outside, it made possible a rigorous science of efficient action; and it opened, at the same stroke, a fateful slippage. It is a short step, and one Weber himself did not take but the tradition after him did, from "reason can operate on means, the end being given" to "reason *is* the operation on means, and the end is simply given." Once the end is bracketed it is easily forgotten as a question, and the bracketing that was meant as a division of labor within reason hardens into a definition of reason as such. What drops out is precisely the rationality of ends, the reasoned deliberation about what is worth pursuing, which Weber had kept in view and which the instrumental turn consigns to the merely subjective, a matter of decision rather than of reason. The seed of optimizationism is here: a form of reasoning whose entire content is the maximization of the satisfaction of an end it does not itself examine.

The marginalist objectification of the objective

The second moment gives the bracketed end a mathematical body and, in doing so, smuggles in the assumption on which everything later turns. In the marginalist tradition the ends of action are gathered into a single object, the utility function, and the agent is defined as its constrained maximizer; economics is recast as the science of the relation between ends and scarce means with alternative uses, and the rational agent is the one who allocates the means so as to maximize utility [14]. Two things happen here that the criticism will need to have

named. The first is a *commensuration by construction*. To represent the heterogeneous ends of a life as arguments of one function returning one magnitude is already to assume that they share a scale, that gains in one can be set against losses in another and a net computed; the common scale whose existence the third impossibility will deny is not argued for in the marginalist construction but built into the form of the utility function, where it becomes invisible precisely because it is structural rather than asserted. One does not notice an assumption one has been given as the shape of the tool. The second is an *objectification of the end*. What in Weber was an end held by an agent, something the agent is toward, becomes a function the agent *has*, a fixed datum standing ready for the optimization to range over; and with this the endogeneity of ends, their formation and revision within the very activity that pursues them, drops silently from view. The agent of marginalism arrives at his problem with his function already written, and the writing is treated as no part of the economic act, as though preferences were furniture brought to the room rather than something that happens in the living.

The axiomatic universalization in decision theory

The third moment lifts the maximizing agent clear of economics and installs him as the definition of rationality wherever there is choice at all. In the theory of expected utility, a small set of axioms on preference, of which completeness and transitivity are the load-bearing pair, is shown to entail that the agent's choices can be represented as the maximization of the expectation of a utility function; to be rational just is to choose as if maximizing such a function [16, 18]. The result is a genuine achievement, elegant and, within its assumptions, unimpeachable, and the paper does not dispute the mathematics. What it marks is the quiet enormity of one axiom. Completeness requires that for any two options the agent prefer the one, prefer the other, or be indifferent, and this innocuous-seeming demand legislates that there is no pair of goods standing in any fourth relation, none between which preference is not yet settled in a way no sweetening resolves; transitivity then chains the pairwise comparisons into a single order. To accept the axioms is thus to decree, at the ground floor and before any particular choice is examined, that value is commensurable and the rational agent a maximizer on one scale, and, worse for the later argument, to make this decree the very meaning of the word "rational." The consequence is that the person who declines to place two goods on a common scale, who holds that a vocation and a friendship are not rankable as better, worse, or precisely equal, is no longer voicing a substantive view about the goods that might be right; he is, by the definition now installed, irrational, his refusal a symptom rather than a position. Optimization, which entered as the efficient fitting of means to a bracketed end, has become by this third step the criterion of reason itself, binding on every chooser, in love no less than in commerce, and the completeness axiom has made the denial of commensurability unsayable within the frame, since to deny it is simply to fail the definition of the rational.

The reach of the genealogy, and its limit

Set end to end, the three moments trace the elevation of a local operation into a picture of the world: the bracketing of ends that made a pure calculus of means possible, the objectifica-

tion and construction-borne commensuration of ends in the utility function, and the axiomatic installation of the maximizer as the meaning of rationality as such. What the genealogy establishes is that the claim “optimization is the form of rationality,” and its cosmic shadow “optimization is the form of things,” are constructions rather than findings, and that at each step an assumption entered, commensurability above all, which could have been declined and which the paper will argue is false in the domain of intimate relation. What the genealogy does not establish, and does not pretend to, is that optimization is thereby worthless; the fallacy of dismissing a tool by its history is one the paper is careful not to commit. Optimization is a superb instrument within the domain where its four conditions hold, and the shipping fleet of the previous section is not the exception but the rule across engineering, logistics, and the allocation of genuinely fungible resources, where to refuse the maximum would be a failure of reason and not a fidelity to anything finer. The error lies in the universalization rather than in the operation, in the inference from “this works wherever value is complete, fixed, commensurable, and owned by a stable subject” to “value is everywhere so, and where it seems not to be we have merely not yet done the sums.” That inference is what the completeness axiom makes feel like a truism and what the genealogy exposes as a step that was taken and could have been refused. It is that inference, and not the mathematics of maximization, that the next part denies, condition by condition and starting from the ground.

Part Two Four Impossibilities: Why Intimate Relation Is Not a Well-Defined Optimization Problem

4. The First Impossibility: The Non-Structurability of Value

The four impossibilities descend from the most superficial precondition of the anatomy to the most fundamental, and it is worth being explicit at the outset about why this first one comes first, since the order is an argument in itself. The later impossibilities all concern a function already written: whether it can be held fixed, whether its values share a scale, whether a stable subject owns it. They presuppose, that is, that the values at stake have already been got onto the page as terms, and they ask what goes wrong thereafter. This first impossibility strikes earlier, at the writing itself. It asks whether certain of the values any honest account of intimate relation must weigh can be set down as terms at all, and it answers that some cannot, so that the objective is not merely hard to fix or to compare but impossible to complete. A value that cannot be written into J is not a value the optimization prices badly; it is a value the optimization never reaches, excluded not from the maximum but from the statement of the problem. If this is right, the optimizing ambition fails at the first step, before the later impossibilities are even in view, and the completeness on which the whole ambition silently rests is shown to have been unavailable from the start.

The completeness demand, made precise

The claim must be sharpened before it can be defended, because in a loose form it is merely the tired complaint that love is too rich for numbers, and that complaint the economist can absorb without a scratch. His reply, rehearsed already in the introduction, is that a value which seems to resist the function resists only because the function is written too poorly, and that a richer specification, with the goods of intimacy and the long horizon and the pleasures of the bond all entered as arguments, would take up whatever a first pass left out. The reply has real force, and it has a distinguished lineage: the program of extending utility maximization into the household, into marriage, fertility, and the allocation of affection, was carried out in detail and with great ingenuity, and it proceeded exactly by folding ever more of intimate life into the arguments of a utility function [14]. To meet it one must state precisely what it demands. It demands *completeness*: that for every value v bearing on the relation there exist a term t_v , a representation of v as an argument of J such that the candidate states of the relation are ordered by how much of v they deliver. Completeness is not an incidental wish of the program but its condition of adequacy, for an objective that omits a value that genuinely bears on the relation is an objective for some thinner thing, and to maximize it is to optimize a caricature. The economist needs completeness, and the question is whether he can have it.

He can have it for a great many values, and the paper concedes this freely, since the concession sharpens the point of attack. Comfort, shared leisure, the division of labor in a household, even many of the tendernesses of a life together admit of proxies stable enough to serve as terms, and where they do the optimizing frame is not obviously ill-posed but merely, as the later parts will argue, ethically and practically treacherous. The first impossibility does not rest on the mass of ordinary goods that can be proxied. It rests on the claim that *at least one* value the objective must include cannot be, and that its exclusion is fatal to completeness however well the rest is done. The paper meets the demand, therefore, not at its weakest point but at its hardest: with the one value whose inclusion the economist most needs and least can secure, the psychoanalytic drive.

The drive as the value that cannot be written

That the drive must be in any complete objective for intimate relation is not a point the economist can concede away, for the drive is not an ornament at the edge of the bond but among its springs. What draws two people and holds them, what makes a particular other the one whose presence is not substitutable by another of equal merit, what gives desire its insistence and its opacity even to the one who feels it, belongs to the economy of the drive; an objective for a love that left it out would be an objective for companionship or for mutual advantage, some real thing but not the thing in question. So the drive must be a term. And the drive is precisely what admits of no term, for reasons that lie in its structure and not in our instruments.

The drive, in the register the series has used throughout, arises at a coupling of the Real and the Symbolic and reduces to neither [7, 8]. It is not a preference. A preference is a settled

disposition to rank options, and a ranking is exactly what a term records; if the drive were a preference it would pose no problem, and could be written down like any other. But the drive does not rank the options in the feasible set, because what it circles is not among them. It orbits an object that is not a positive object at all but a vacancy, the place of what is constitutively missing, and it draws its force from the orbiting rather than from any attainable state that might be reached and possessed. This has a consequence that is fatal to representation as a term. A term t_v must assign to each candidate a magnitude, so that candidates can be ordered by it, more here, less there, monotone in the good; and the assignment must be such that getting more of the good is, other things equal, getting nearer the objective's maximum. The drive violates this at its core, for it is extinguished by attainment where attainment occurs: the state that would count, on any proxy, as the fullest delivery of the good is the very state in which the drive, having reached its ostensible object, finds that the object was never it, and moves on. The mapping a term requires, from more of the good to nearer the maximum, is not merely inaccurate for the drive; it runs backwards, and no monotone magnitude can be laid over a structure whose satisfaction is its own undoing.

An illustrative case — the ledger of a marriage. Consider the attempt made in earnest rather than in theory. A couple, urged toward the frame by a culture that prizes it, resolve to reason about their marriage as an optimization: to enumerate what each values, to weigh the yields against the costs, and to act on the balance. Much of the enumeration succeeds. They can list the division of housework, the comfort of a shared home, the pleasures of company, and can even, with effort, assign these rough weights and speak of trade-offs among them without absurdity. Then one of them tries to enter the thing that actually binds them to this person and not another, equal on every listed count, and the enumeration fails. It is not that the value is large and hard to weigh. It is that when they try to say what it is a quantity *of*, every candidate answer, security, admiration, pleasure, familiarity, turns out to name something that a different person could in principle supply as well or better, and so to name not the bond but a proxy the bond exceeds. The remainder that resists every proxy, the sheer this-one-ness that is why the ledger is being kept at all, is precisely what will not go into a column, because it is not a quantity of anything and answers to no “more” or “less.” The ledger can be completed only by leaving out the reason for keeping it.

To force the drive into a term one would therefore have to replace it with a proxy, some measurable satisfaction standing where it stood; and here the decisive move of the economist's program can be named and refused. The program's most powerful device is revealed preference: the resolve to sidestep the inner life entirely and read value off behavior, defining what a person values as whatever their choices maximize, so that the drive, whatever it is in itself, is captured by the pattern of what the person is observed to choose. This is ingenious and, for a wide class of goods, unobjectionable. Against the drive it fails, and its failure is instructive. Revealed preference assumes that choice reveals a stable underlying ordering, that the pattern of choices is the trace of a preference the choices express. But the drive produces exactly the pattern revealed preference cannot parse: the pursuit that abandons its object on attainment, the choice that undoes itself, the wanting whose satisfaction is its extinction. Faced with this,

revealed preference must either declare the behavior irrational, thereby excluding from the account the very spring of the bond it was meant to capture, or fit an ordering to the choices post hoc, thereby recording as a stable preference a movement whose whole character is that it is not one. In neither case has it represented the drive. It has, in the first, thrown the drive out as noise, and in the second, replaced it with a fiction of stability that is a different thing wearing its name. The proxy is not a poorer measurement of the drive. It is the substitution of a positive object for a vacancy, which is exactly the operation that empties the drive of what makes it the drive.

The category of the failure, and its consequence

The nature of the failure must be fixed exactly, because everything downstream depends on it. The failure is not epistemic. It is not that the drive is hard to quantify, that our instruments are coarse and our surveys noisy, and that a finer psychometrics would in time get its number. That reading leaves the optimizing frame wholly intact, conceding only that the measurements are poor; and it is the reading the paper most needs to refuse, because it is the one that keeps the door open to “do the sums better.” The claim is stronger and stranger: that there is here no number to be measured well or badly, that the mapping from the drive to a magnitude fails not in its accuracy but in its existence, because the drive is not the kind of entity of which there is a quantity to be had. This is the same distinction the anatomy drew between a problem that is merely hard and a problem that is ill-posed, and the drive falls on the second side of it not by degree but by kind.

Non-structurability. A value is *non-structurable* if its manner of being precludes its representation as a term in an objective function, that is, precludes any assignment to the candidate states of a monotone magnitude by which they could be ordered. The psychoanalytic drive is non-structurable: arising at a coupling of the Real and the Symbolic, circling a constitutive vacancy rather than a positive object, and extinguished by attainment where attainment occurs, it admits no monotone magnitude over the candidates and so no term. Its exclusion from the objective is therefore not a defect of measurement, remediable by finer instruments, but a matter of category. It cannot enter the statement of the problem.

The consequence is fatal to the economist’s reply on its own terms, and it is worth drawing the dilemma out to its end so that no escape is left standing. The reply promised to rescue optimization by completing the function; completeness for intimate relation requires a term for the drive; the drive admits no term. So the function must either omit the drive, in which case it is incomplete and the reply has not been made, the objective being one for some thinner relation that leaves out a spring of this one, or include a proxy for the drive, in which case it has put a positive object where a vacancy was and is again not an objective for this relation but

for a substitute, so that the optimization, however impeccably posed thereafter, maximizes the wrong thing at the ground floor. There is no third path on which the drive is both admitted and itself, because admission as a term just is the imposition of a magnitude, and the drive admits none. The first precondition of the anatomy, that every value at stake be representable in the objective, therefore fails, and it fails before the questions of fixity, comparability, and the optimizer can be raised, since those concern a function already written and this concerns the writing. One may read the three impossibilities that follow as showing that even the incomplete function one could write, over such values as do admit of terms, would still furnish no well-posed problem. But this first has already shown that the function was condemned to be incomplete, and that the completeness on which the whole optimizing ambition depended was never there to be had.

5. The Second Impossibility: The Relationality of Value and the Absent Quantifier

Suppose the first impossibility set aside, and grant, only to press on, that a function could be written over such values as do admit of terms. The second condition of the anatomy then comes into view: that this function be exogenous and fixed, given before the process of pursuit and unchanged by it, a determinate target rather than a moving one. This section denies that condition. But it denies it in a particular way, and the way matters as much as the denial, because a weak version of the denial changes nothing and the economist has already absorbed it. The weak version says that people's preferences are unstable, that they want one thing today and another tomorrow, and that the objective therefore drifts. To this the economist answers, rightly, that instability is just more structure to model: let the utility function carry a time index, or let today's choice include a term for its effect on tomorrow's tastes, and the drift is absorbed into a larger fixed problem. The paper's denial is not the weak one and does not meet this answer, because it does not locate the trouble in the instability of preferences at all. It locates it deeper, in the ontology of the value itself, and argues that value in intimate relation is *relational*, generated within the relation and existing only there, so that there is no standpoint outside the relation from which its magnitude could be read off and fixed. The objective cannot be exogenous because there is no exogenous position for it to be given from; and this is not a fact about wandering tastes that a time index could catch, but a fact about where relational value is, which no reindexing reaches.

Value as relational rather than intrasubjective

The utility function is a function of one subject. It encodes *his* preferences, the values as they stand for *him*, and its arguments are states of the world evaluated from his single standpoint; and even the theory of games, which sets several such functions interacting, leaves each the private possession of its owner, given before the interaction and merely played out through it. The whole construction presupposes that value is intrasubjective, lodged inside a subject and carried by him to the situation as a piece of his equipment. It is exactly this presupposition that the relational ontology of the series denies, and the denial is not a mood but a claim

with consequences. The value at stake in an intimate relation, the meaning that a private word carries, the weight a kept silence has come to hold, the worth of the bond itself, is not a property either partner keeps inside and brings; it is generated between them, in the relating, and has no existence apart from the relation that bears it [21, 23]. This is not a metaphor. A private language means nothing to either speaker considered alone, because its meaning is the sediment of a shared history and is stored in the relation and not in either head; a rite that is precious to the two is not a datum in either partner's separate ledger, because its preciousness is not a fact about either of them but a fact about what has formed between them. Value here has the standing that trust was shown to have in the paper on the non-binding vow: a property of a relational structure, a feature of the topology of the bond, and not an attribute of any node within it [21].

An illustrative case — the worth that is not in either of them. Two people have, over years, made a certain walk their own: a particular route, taken on particular evenings, that has gathered to itself the whole texture of their life together, so that to walk it is for each of them an act dense with meaning. Ask what the walk is worth, and to whom, and the question comes apart in the hand. It is not worth much to either of them *separately*: taken alone, one of them walking the route is a person on a road, and the meaning that floods the shared walk is simply absent, having no bearer. Nor is its worth the sum of two private worths, for there are no two private worths to sum; the meaning does not exist in either of them to be added. It exists between them, in the relation the walk both expresses and sustains, and it exists nowhere else. There is, then, no ledger in which the walk's value is an entry, because a ledger is kept by a subject and totals what has worth *for him*, and the walk's worth is not of that kind. To insist on entering it one would have to pick a standpoint, his or hers, and record from there a private shadow of a value that is not private, thereby recording something other than the value one meant to capture.

The quantifier that quantification requires, and its absence

From the relationality of value a consequence follows that is fatal to the exogeneity condition, and it is worth drawing out slowly, because it joins this impossibility to the deepest commitment of the series. To *quantify* a value, to assign it the magnitude a term in J demands, is to occupy a definite position: the position of one who surveys the field of value from outside and above, sees the candidates and their worths spread before him, and reads each onto a common scale. Quantification is silently a view from nowhere within the valued field, a God's-eye operation, and it presupposes a standpoint exterior to the values it measures. For value that is intrasubjective this presupposition is met without difficulty, at least in principle, since the subject stands over against the world he evaluates as its external assessor; his preferences are inside him and the world is outside, and he reads the one onto the other. But for value that is *relational*, generated within the relation and existing only there, the presupposition cannot be met at all. Whoever would quantify such value must stand either within the relation or outside it, and neither will serve. Standing within, he is a party to the very generation he would assess, with no exterior purchase, no vantage from which the relational value lies spread before him

as an object; he is inside the thing he would survey. Standing outside, he finds nothing to survey, because the value exists only within and is not present to any external position. There is no third place, no exterior and omniscient vantage from which the worth of what two people generate between them could be read onto a scale. And this is precisely the standpoint that quantification requires: the standpoint of a big Other who would hold the true measure of all relational value. The whole of this series, following the mother paper, has argued that this Other does not exist, that there is no metalanguage and no position from which the meanings by which people live could be assessed from without [20, 21]. To assign relational value a determinate magnitude is therefore to presuppose the one standpoint the series has shown to be empty.

The vacant quantifier. Value in intimate relation is *relational*: generated within the relation and existing only there, a property of the relational structure and not of any subject within it. To quantify a value is to assign it a magnitude from a standpoint exterior to it. For relational value no such exterior standpoint exists, since a position within the relation has no external purchase on it and a position outside the relation has nothing before it to assess; the standpoint quantification requires is that of a big Other holding the measure of all relational value, and this position is empty. The objective of an optimization over intimate relation therefore cannot be exogenous, having no external vantage from which to be given, nor fixed, being generated in the same motion that would pursue it. The endogeneity of the objective is not a contingency of unstable preference but the ontological consequence of the relationality of value.

The defeat of the economist's reply

This is the point at which the economist's reply is not merely met but defeated, and the defeat should be stated exactly, because the reply is resilient and returns in new dress if left half-answered. The reply was: your objective is misspecified or unstable; specify it better, index it to time, and the trouble dissolves. Against the first impossibility this failed because certain values admit of no term at all. Against the second it fails for a further and independent reason: that even for values which might admit of terms, there is no standpoint from which the terms could be assigned their magnitudes, the values being relational and the assigning position vacant. The reply rests, at bottom, on a picture in which the true worths are already out there, lodged somewhere and waiting to be read by a careful enough observer, so that better specification is a matter of reading them more accurately. That picture is exactly what the relationality of value refuses. Relational value is not lying in wait, outside the relation, to be discovered by a sufficiently patient economist; it is generated inside the relation, in the act, and holds still for no exterior gaze. The objective is not a target the searcher has specified too crudely. It is generated by the searching, revised in the relating, and held fixed by no standpoint that could serve as its source; and an $\arg \max$ over an objective that is produced

in the same motion that would maximize it, and that no external position holds still, does not name a hard problem awaiting a better economist. It names no problem, for there is nothing of the form the operation requires for the operation to be applied.

6. The Third Impossibility: Incommensurability

Grant once more, for the sake of pressing on, that the objective could be written and that some standpoint could fix it. The third condition of the anatomy then requires that the values the objective assigns lie on a common scale, so that any two candidates compare and $\arg \max$ has something to select. This section denies that condition through the incommensurability of certain goods: the thesis, developed most rigorously by Raz, that there are goods between which no common measure holds, so that the demand to rank them on one scale is not a hard task but a mistaken one, and that within intimate relation the attempt to price a good can be, in the strict sense, a betrayal of it rather than a misjudgment. As with the previous two impossibilities, the claim must first be distinguished from a weaker neighbor with which the frame would gladly confuse it, and only then pressed to its sharp form.

Incommensurability as a relation, not a difficulty

The weaker neighbor is the thought that some comparisons are merely hard, that weighing a career against a friendship is difficult and uncertain and beyond our present precision. This the optimizing frame absorbs without strain: hard comparisons are comparisons still, and difficulty is only a call for better estimates. Incommensurability in the strict sense is a different matter, a positive structural relation and not a confession of ignorance. Two goods are incommensurable when there is no common measure in terms of which their values are precisely comparable, when it is neither true that the first is better than the second, nor that the second is better than the first, nor that they are exactly equal [2, 13]. The three familiar relations of a common scale, better, worse, equal, are jointly exhausted only where a scale underlies them; where none does, two goods may stand outside all three, related in a way the scale cannot represent, and this standing-outside is not our failure to have measured but the goods' failure to share a measure. The most exact mark of the relation is due to Raz and deserves to be given precisely, because it converts a vague intuition into a test. Suppose two options were merely *equal* on some common scale. Then improving one of them even slightly, sweetening it by a little, would have to make it determinately better than the other, since on a scale a small addition to an equal quantity yields a larger quantity. Now take a career and a friendship one is inclined to call equally choiceworthy, and sweeten the career by a modest raise in salary. If the two were equal on a scale, the raised career is now determinately the better choice. But it is not: the career with the raise is still neither better than the friendship, nor worse, nor exactly equal, just as before the raise. The tie does not break under the small improvement, and a tie that does not break under improvement was never a tie on a scale at all. The small-improvement argument shows, not that the comparison is hard, but that there is no scale beneath it to be hard about.

Pricing as betrayal

Within intimate relation this structural relation takes a sharper form, in which the attempt at commensuration is not only a mistake about the goods but a wrong done to them, and here the paper leans on the line running from Raz through Anderson to the recent moral critique of markets [1, 15]. The sharpening turns on a fact about certain goods: that they are constituted, in part, by the stances one takes toward them, so that to take the wrong stance is not to misdescribe the good but to alter it. Among the goods so constituted are those whose being includes a refusal to price them. For such a good, to price it is not to measure it, even badly; it is to change it into something else, and in the changing to betray it. This is why the refusal to name a sum is not squeamishness. To ask what payment would compensate the ending of a friendship is not to arrive, with effort, at a large figure; it is to have misunderstood what a friendship is, since a bond one holds oneself ready to release for a price is, by that readiness, already not the bond one took oneself to be pricing but a lesser thing wearing its name. The pricing does not report a worth and get the figure wrong. It produces, in the act of pricing, a diminished thing, and reports a fact about that.

An illustrative case — the offer. A man is asked, by someone who means the question seriously, what sum would induce him to give up his oldest friendship, permanently and with no further contact. Two things are worth noticing in his response. The first is that he does not experience the question as difficult, as though the number were very large and hard to fix; he experiences it as a category mistake, as one would the question how much the number seven weighs. The second is more telling. If he were to take the question in the spirit asked, to begin in earnest to name a figure and to negotiate it upward, something would already have happened to the friendship, before any sum was agreed and whether or not one ever was. To have entertained the offer in earnest is to have constituted oneself as someone whose friendships are for sale at a price, and a friendship held by such a person is not the good the offer was meant to price. The betrayal is not in the accepting, which never comes; it is in the pricing, which changes the thing priced in the moment it treats it as priceable. This is why the fitting answer is not a very large number but a refusal of the frame, and why the refusal is not a failure to compute but the only response that leaves the good intact.

Incommensurability. Two goods are *incommensurable* when they stand in none of the three relations a common scale affords, being neither better, nor worse, nor exactly equal, as the failure of their tie to break under small improvement reveals. Certain goods at stake in intimate relation are incommensurable in this sense; and some are further constituted, in part, by the refusal to price them, so that to place them on a common scale is not to mismeasure them but to transform and thereby betray them. The scalar condition of the anatomy therefore fails: the values the objective assigns do not all lie on a common scale, and $\arg \max$, which requires such a scale to have anything to select, has nothing over which to operate. The error is one of category and not of computation; the goods are not the kind of thing of which there is a sum.

The relation to the first two impossibilities

The three impossibilities so far compound rather than repeat one another, and it is worth marking the joints at which each cuts, since an objector may suspect that they are a single complaint in three costumes. The first concerned *representation*: whether a value can enter the objective as a term at all, and it found that the drive cannot, being extinguished by the attainment a monotone magnitude would track. The second concerned *fixation*: whether the objective, granting it written, can be given from an exterior standpoint, and it found that relational value admits none, being generated within the relation that bears it. This third concerns *comparison*: whether the values the objective assigns, granting them written and fixed, lie on the common scale that maximization requires, and it finds that incommensurable goods do not. The three are independent, and their independence is the strength of the case, for an objector who somehow answered one would face the others untouched: were the drive representable after all, its term would still have to be commensurated with the rest, and incommensurability would block it; were an exterior standpoint somehow found to fix the objective, the goods it fixed would still fail to share a scale. The descent is real, from whether the problem can be written, through whether it can be fixed, to whether what it fixes can be compared; and beneath all three lies a fourth question the descent has been circling from the start, not yet touched, the question of the one for whom the problem is a problem at all, the optimizer whose stable preferences the whole construction has quietly presupposed and whom the next section dissolves.

7. The Fourth Impossibility: The Constitution of the Subject

The three prior impossibilities concerned the objective: whether it can be written, fixed from without, and furnished with a common scale. This last one reaches beneath the objective to the quietest condition of the anatomy, the one that underwrites the others and is least often brought to light, that there is an *optimizer*. Maximization requires not only something to be maximized but someone to maximize it: a subject whose objective J is, whose preferences it encodes, standing outside the problem, prior to it and stable through it, as the one for whom x^* is best. Without such a subject the phrase “his optimum” has no determinate referent, for there is no settled *his* to whom the optimum belongs. This section denies that condition. In intimate relation the subject is not prior to the relation but constituted within it; the one who would optimize is a product of the process he is imagined to stand outside of; and the “who” the whole construction presupposes loses the fixity the construction needs.

The subject as constituted, not given

The optimizing frame inherits from marginalism a subject who arrives at the situation already formed, bearing a preference order settled in advance, which the situation then reveals and satisfies. Even the more sophisticated economics that allows preferences to change tends to

model the change as itself the output of a prior and stable meta-preference, a fixed disposition governing how tastes evolve, so that the fixity merely retreats one level and the subject remains, at bottom, given before the process. The relational ontology of the series denies this picture at its root, and denies it of the subject exactly as it denied it of value, since the two denials are one. The subject of intimate relation does not enter the relation with its preferences fixed and undergo the relation as their playing-out. It is formed in the relating: its desires are shaped by the other's desire, its sense of what is worth wanting is remade in the shared life, and its individuation, the very drawing of the boundary between what it is and what the other is, is accomplished and revised within the bond rather than settled before it [22, 23]. This is not the mild and assimilable point that people change their minds, which a meta-preference could absorb. It is the ontological point that the preference-bearing subject the optimization presupposes, the fixed evaluator standing over against the field of options, is not the antecedent condition of the intimate relation but one of its ongoing products. What the relation generates is not only value between the partners but the partners themselves, as the valuers they are in the course of becoming.

An illustrative case — who would collect the optimum. A person enters a relation with a settled sense of what he wants from a life, and over years within it that sense is remade: he comes to want things he had not known were wantable, to find hollow some things he had once ranked highest, to care about the other's flourishing in a way that is not reducible to his own prior preferences because it has reorganized them. Suppose now he had, at the outset, tried to choose the relation by optimization, computing which arrangement best satisfied the preferences he then held. The arrangement that maximized the preferences of the man at the outset is not the arrangement the man he became would choose, and not because either made an error, but because the second man's preferences are the product of the very relating that the first man's optimization was meant to govern from before it began. Whose optimum, then, was to be computed? Not the first man's, for he no longer exists to collect it, and his preferences were dissolved and reformed by the process. Not the second man's, for he did not exist yet at the moment of choice, and could not have supplied the objective, being himself an output of what was chosen. There is no single subject present throughout to be the owner of the objective and the beneficiary of its maximum. There is a subject in the course of being constituted by the relation whose value the optimization would compute, which is a different thing from the fixed optimizer the frame requires.

The dissolution of the fixed referent

From this a difficulty follows that is fatal to the fourth condition, and it is a difficulty about reference rather than about stability, which the case has made ready to state. If the optimizer is constituted within the very process his optimization is supposed to govern, then "whose optimum?" has no fixed answer, because the subject named in any answer differs at the end of the process from the one who posed it at the start, and the difference is produced by the process itself. This is worse than the drift of the objective treated under the second impossibility, and must not be folded into it. There the target moved while the archer stood still; here the archer

is remade by the shooting, so that the one who would gather the optimum at the summit is not the one who set out to climb and did not hold, at setting out, the preferences by which the summit is a summit. The frame needs a stable subject to be the owner of the objective and the beneficiary of its maximization, the one whose J it is and for whom x^* is best; and in intimate relation there is no such stable owner, only a subject in the making whom the relation is precisely in the business of unfixing. To ask what is optimal *for him* is to presuppose a settled him that the relating dissolves and reforms, and the referent of the optimizing “who” comes apart in the asking.

The constituted subject. Optimization presupposes an *optimizer*: a subject prior to the problem and stable through it, whose objective the function is and for whom its maximum is best. In intimate relation the subject is constituted within the relation rather than given before it, its preferences and its individuation ongoing products of the relating. The optimizer is therefore a product of the process it is imagined to stand outside of, and “whose optimum?” loses a fixed referent, the subject named in any answer being remade by the very process the optimization would govern. The fourth condition of the anatomy fails: there is no stable subject to own the objective or to be the beneficiary of its maximum.

The four taken together

The four impossibilities may now be gathered, and gathering them shows that they are not four names for one objection but four independent failures at four distinct joints, running from the surface of the problem to its ground. Can the values be *written* into the objective? Not all: the drive, extinguished by attainment, admits no term. Can the objective, so far as written, be *fixed* from without? No: relational value admits no exterior standpoint, and the objective is endogenous of ontological necessity. Can the values it fixes be *compared* on a common scale? Not the incommensurable ones: the scale $\arg \max$ needs is not there. And is there a stable *subject* to own the whole and receive its maximum? No: the optimizer is constituted in the process it would govern. Each cut is at a different joint, and each alone suffices, since an optimization problem needs all four conditions and the failure of any one leaves the operation undefined. Together they establish, without a single appeal to value, that intimate relation furnishes no well-defined optimization problem: not a hard one that greater computational power would crack, but an ill-posed non-problem, whose required object, a representationally complete, exogenous, fixed, scalar objective belonging to a stable subject, the operation of maximization does not find. With this the formal movement of the paper is complete. What follows is no longer proof but criticism, and it turns to the different question the proof has cleared the way for: not whether one *can* optimize intimate relation, which has been answered in the negative, but what befalls the relation when, undeterred by the answer, one imposes the frame regardless.

Part Three The Cost of Optimizationism

8. The Damage to Generativity

The second movement of the paper begins here, and its question differs in kind from the first. The first movement asked whether intimate relation furnishes a well-defined optimization problem and answered that it does not; it passed no judgment on optimizing, establishing only that here the operation is undefined. This movement takes that result as settled and asks a question the result makes newly pressing: what happens when the frame is imposed regardless, when a domain that furnishes no well-posed maximization is treated as though it did, its relational and incommensurable and endogenous goods forced into the shape of an objective to be maximized? From here the claims are value-laden, and openly so; and the separation insisted on in the introduction is what earns them the right to be, for they no longer trade on the formal result but build upon it, taking as given that no optimization problem is present and asking after the cost of pretending one is. The first such cost, argued in this section, is a damage with a definite form: the imposition converts a value that should circulate and accumulate within a relation into a quantity that can be settled, extracted, and in the end exhausted.

Two fates for generated value

The theory of generative justice, developed in this series in exchange with Eglash, distinguishes two fates that the value generated in a relation may meet, and the distinction is the hinge of this section [3]. Value may *circulate*: return to those who generate it, replenishing the conditions of its own further generation, so that the relation is a site of ongoing production that sustains itself and the value stays in motion among its makers. Or value may be *extracted*: drawn off from its generators, alienated, settled somewhere outside the circuit of its making, so that the relation is mined rather than cultivated and its capacity to generate is drawn down toward depletion. Eglash's own cases are drawn from labor, ecology, and the technical arts, where the value in question is relatively legible and its diversion relatively easy to see; the contribution of this series has been to carry the distinction into intimate life, where the value at stake is least legible and its diversion hardest to name, and where, this paper now argues, the optimizing frame is one of the chief instruments of the second fate. The claim is not a loose analogy between mining ore and pricing love. It is that the operation optimization performs on a relational good is, in its formal structure, an operation of extraction, and the next step is to show why.

The effect of optimization on a circulation

To see the extraction one must see what optimization does to a value when it forces it into an objective. To make a relational good a term in J is to render it a *quantity*: a magnitude that can be summed with others, compared, traded off, and, above all, *settled*, brought to a final accounting at which one reads off whether the maximum was reached. But a relational

good is not, in its own manner of being, a settleable quantity. It is a circulation, a generation whose life is in its continuing and which has no natural terminus at which it is complete and may be totalled. Meaning between two people is not a stock that accumulates toward a full amount; it is a movement that is either kept up or allowed to lapse. Rendered as a quantity to be maximized, such a good is made available to be settled, and to settle a circulation is to stop it. The optimizing frame does not merely mismeasure the relational good, assigning it a number that is off. It re-forms the good into the kind of thing that can be cashed out, and the cashing out is the depletion, because what is cashed out is no longer in circulation. The harm is thus not that the optimization reaches a wrong figure. It is that the operation of rendering-as-quantity, which optimization must perform before it can begin, has already converted a generation into a stock and thereby positioned it to be drawn down.

A single geometric illustration

The series has given this depletion a geometric form elsewhere, and it earns one sentence here, strictly as illustration and not as apparatus to be developed. In the account of the good and the bad cycle, generative value was shown to be carried not in any endpoint state but in the accumulated phase of a circuit, the holonomy an interpreter gathers in traversing it, which no terminal reckoning can capture because it is a property of the path and not of any point upon it [19]. The single relevant point is this: that optimization, whose entire grammar is the selection of a best *point*, an x^* in the feasible set, is by its very form blind to value that lives in a path rather than a point, and so cannot so much as register, let alone protect, the generative accumulation it settles away. The apparatus is not needed here and will not be unfolded; it serves only to name, in a vocabulary the series has already made precise, why a value carried in circulation is invisible to an operation that knows only summits.

An illustrative case — the audited relationship. A couple, anxious and conscientious, begin to keep an account of their relationship: to track what each contributes and receives, to note whether the returns justify the investment, to hold periodic reckonings at which the question is whether, on balance, the thing is paying off. Their intention is care; they mean to tend the relationship by measuring it. But the measuring does to the relationship exactly what this section describes. What had been a circulation, a giving and receiving whose worth lay in its ongoing motion and never stood still to be totalled, becomes a stock to be assessed at each reckoning; and a stock assessed is a stock that can come out short. The damage is not that the audit might return an unfavorable balance and end the relationship, though it might. The damage is prior to any balance and independent of its sign: it is that the auditing has changed the good audited, converting a generation kept alive by not being totalled into a quantity that exists to be totalled, so that even a favorable balance is now a balance struck on a diminished thing. The couple set out to protect the circulation and, by rendering it accountable, stopped it in the act of counting it.

The form of the damage

The damage can now be stated in its proper shape, and stated so that it is plainly a harm and not a mere infelicity of description. When a relational good is subjected to the optimizing frame it undergoes three movements. It is first rendered as a term, which requires assigning it a settleable magnitude it did not possess. It is then entered into an objective to be maximized, which subordinates it to the reckoning of a total in which it figures as one summand among others. And it is then, in the maximizing, spent: treated as a stock to be drawn down toward a maximum rather than a circulation to be kept in motion. This is the formal signature of extraction, and it is why the couple who begin in earnest to ask whether the relationship is worth it have already begun the conversion the theory of generative justice warns against, whatever answer they reach. The harm is not the risk of an unfavorable verdict. It is that the reckoning itself has changed the good reckoned, in the same way and for the same reason that the pricing of the previous part diminished the friendship it priced: by treating as a settleable quantity what had its life in never being finally settled. Optimization imposed where no optimization problem exists is thus not an idle error that leaves its object untouched while failing to improve it. It is an operation that remakes its object into something it can act upon, a settleable quantity, and in the remaking performs the very extraction that draws off into a final accounting the value whose life was in never being finally accounted.

9. Optimizationism as a Symptom of Modernity

The criticism now widens from the damage optimization does within a single relation to the standing of optimizationism as a general thesis about the world. The claim of this section is that the elevation of optimization into a law of the universe is best understood not as a discovery but as a *symptom*: an epistemological form taken by a particular historical condition, which the mother paper of this series named the crisis of the symbolic, and which is bound up with the habituation of a life-world to the logic of capital [20]. The universe, on this reading, climbs no landscape; the climbing of landscapes is a historically specific practice, native to a specific organization of production, that has been projected outward onto the cosmos and taken for its law. To argue this is not to refute optimizationism by its origins, the fallacy already disowned, but to relocate it: to move it from the register of eternal truth, where it defends itself as simply how things are, into the register of historical symptom, where one may ask what condition it expresses and what that condition costs. The genealogy of the first part showed that optimizationism was constructed; this section asks what, in the present, keeps the construction standing and makes it feel like nature.

The commensurating operation as the native form of capital

The decisive feature of optimizationism, isolated already in the genealogy, is its demand for commensuration: its requirement that heterogeneous goods be brought onto a single scale before a maximum can be defined. This requirement is not peculiar to the theory of optimization, and seeing where else it lives is the key to the diagnosis. It is the native operation of capital.

The circulation of capital consists in nothing else than the reduction of qualitatively incomparable things, an hour of labor, a measure of grain, a song, an afternoon of care, to a common quantity in which they can be exchanged, accumulated, and made to breed more of themselves; the value-form is precisely a commensurating machine, and the historical career of capital is the spread of its commensuration into region after region of life, until things once held to lie beyond price acquire one and enter the circuit [11]. Optimizationism is the epistemology proper to this machine. It is what universal commensuration looks like once it is raised from a practice to a theory of rationality and thence to a picture of the world: the settled conviction that behind the apparent heterogeneity of goods there always lies a scale on which they compare and a maximum toward which reason should climb. The conviction feels self-evident to the modern mind not because it is a self-evident truth but because the mind has been formed within a life-world that performs the commensurating operation on everything, ceaselessly, until the performability of the operation comes to seem a property of the goods rather than an imposition laid upon them. This is the critique of instrumental reason that the Frankfurt tradition pressed: that reason, reduced to the calculation of means and the commensuration of ends, mistakes its own historically produced form for reason as such and forgets the ends it can no longer reason about [4, 5].

The symbolic crisis and the flight to the scale

The mother paper diagnosed the present as a crisis of the symbolic, a hollowing of the shared meanings by which a world is held together, and optimizationism can be placed within that diagnosis as one of its characteristic responses [20]. The placement explains something the genealogy alone could not: why the constructed picture is not merely available but attractive, why people reach for it. When the thick symbolic orders that once told a community what things were worth, and told it in qualitative and incommensurable terms, lose their hold, a vacuum opens where the sense of worth had been, and into that vacuum the single quantitative scale flows as a replacement. A scale asks for no shared meaning. It needs no agreement about what a thing is for or what makes a life go well, only a number; and so it promises orientation to a disenchanted world that can no longer supply itself with meanings, a way to know what to do, maximize the measure, that survives the collapse of every thick account of the goods. Optimizationism is in this sense a flight: a flight from the difficulty of incommensurable value, which requires judgment and yields no algorithm, into the false comfort of a scale, which requires only computation and spares one the judgment. That the flight should present itself as hard-headed rationality, and the refusal of it as soft sentiment, is itself part of the symptom, for the condition valorizes the very operation that expresses it and recasts fidelity to the real structure of value, the refusal to commensurate what does not compare, as a failure of nerve to be overcome.

The projection onto the cosmos

The last movement of the symptom is the projection of the historically specific operation onto the universe as its law, and it is this movement that the paper's title refuses. Because the

commensurating, maximizing operation is performed everywhere within a certain form of life, it comes to seem that the operation is not being performed but merely recognized, that the landscapes were always there and reason only climbs them. One meets this projection in its popular cosmic form, in which everything from a molecule seeking its lowest energy to a market clearing to an organism maximizing its fitness is said to be “really” optimizing some quantity, so that the human who calculates is at last only doing consciously what all of nature does blindly, and optimization stands revealed as the deep grammar of being. The paper’s denial is aimed exactly here, and it can be put precisely. What is actually observed is not a universe that climbs landscapes but a form of life that climbs them and then, carrying its scale with it, finds the operation everywhere it lays the scale down. That certain physical systems admit description as extremizing a quantity is a fact about the reach of a mathematical formalism, not evidence that nature is engaged in maximization in the sense at issue, the sense in which there is an objective owned by a subject and a best state to be sought; the formalism’s success has been read back into the world as the world’s own procedure. To say that optimization is a law of the universe is to mistake the shadow the commensurating life-world casts over whatever it examines for a feature of what is examined. The practice is real and has a date. The law is a projection. And intimate relation, whose goods are relational and incommensurable and whose subjects are constituted in the relating, is the region where the projection is most plainly false, because it is the region in which the commensurating operation, once applied, most visibly destroys the very thing it was applied to.

10. Optimizing Practice Is Not Ethical Practice

This section is the pivot of the criticism and, in a sense, of the paper, for it states in its sharpest form the claim the title’s question was aimed at from the start: that morality cannot be defined as an optimization problem, and that an optimizing practice, however well it succeeds on its own scale, is not thereby an ethical practice. The preceding sections argued that optimization is ill-posed in intimate relation and that its imposition does damage. This one argues something orthogonal to both, and independent of both: that even where an optimization is perfectly well-posed and perfectly successful, reaching a genuine maximum of a genuine objective, it may still fail as an ethics, because the criterion of the optimal and the criterion of the good are different criteria, answering different questions, and the optimal is not the good. The claim thus holds even in the shipping-fleet domain where the four conditions are met; it is not a claim about ill-posedness at all, but about the gap between maximizing and acting well, which no well-posedness closes.

The orthogonality of the optimal and the good

The series has met a structure of this kind before, and naming the earlier instance sharpens the present one and shows it is not improvised for the occasion. In the paper on the sustainability of generative relation, poetry was shown to satisfy a formal, dynamical criterion, the criterion of the good cycle, of endless non-settling circulation; and it was shown in the same breath that satisfying this criterion does not make a symbolic circulation *good*, since the aesthetics

of fascism and the discourse of the cult satisfy the very same dynamical criterion and are evil [19]. The lesson drawn there was that the dynamical criterion and the justice criterion are orthogonal: the first asks whether a circulation can sustain itself, the second whether it ought to and at whose expense, and a circulation may pass the first and fail the second, so that goodness requires the justice criterion as an independent condition which the dynamics can never supply. The present claim has the same shape, with optimization in the place of dynamics. The criterion of the optimal answers one question: whether, on a given objective, a given option is the best available, whether it sits at the maximum. The criterion of the good answers another: whether the option ought to be chosen, whether it wrongs anyone, whether it honors what the agent is bound to honor. These two are orthogonal. An option may be optimal and wrong; an option may be right and suboptimal; and success on the first criterion is no success whatever on the second, since they do not measure one thing along a common scale but pose different questions that a single answer cannot jointly settle. To have found the maximum is to have answered the first question and not so much as touched the second.

An illustrative case — the optimal betrayal. Suppose a man faces a choice well-posed enough to optimize: the relevant goods admit of proxies, the objective is stable, the scale is available, and he himself is settled in his preferences. He computes, correctly, that abandoning a friend who has become burdensome, at a moment when the friend most depends on him, maximizes his objective, and even, on a plausible specification, maximizes an impartial aggregate of well-being, since his own gain is large and the friend will in time recover. The optimization is impeccable; the maximum is genuine; on its own scale nothing better is available. And the act is a betrayal. The point is not that he has optimized the wrong objective, which would return us to the earlier impossibilities; grant that the objective is as good as an objective gets. The point is that optimality and rightness have come apart, that the very act which is best on the scale is the act that wrongs the one to whom he was bound, and that no refinement of the maximization repairs this, because the wrong is not a quantity the objective failed to include but a feature of the act that the whole dimension of maximizing cannot see. He did the optimal thing, and he ought not to have done it, and both are true at once.

The resistance of morality to the optimizing form

That the two criteria are orthogonal is not a brute fact but follows from the kind of thing morality is, and three features of the moral show why it resists the optimizing form in particular, each naming a place where the case above bites. The first is the *unconditionality* of certain moral requirements. An obligation of the kind Kant placed at the center of ethics does not present itself as one good among others to be weighed in a sum and outweighed should the sum come out otherwise; it presents itself as binding regardless of the balance, a constraint on what may be done and not a quantity to be traded against other quantities [6]. An optimizing frame can represent such a requirement only by falsifying it: either as a very large term that a still larger term could in principle outweigh, which denies its unconditionality, or as an absolute constraint bounding the feasible set, which removes it from the objective altogether and concedes that the moral was never a matter of maximization to begin with. The second feature is the *non-*

tradability of moral considerations. To make a duty a term in an objective is to make it tradable, available to be sacrificed when the numbers favor the trade; but much of what we recognize as moral seriousness consists precisely in the refusal to make certain considerations tradable, in holding that there are things one does not do whatever the yield, and this refusal is unintelligible within a frame in which everything is, by the form of the objective, a quantity that trades [25]. The man in the case did the tradable thing; that the friend's dependence could be traded away for a sufficient gain is exactly what a moral seriousness would deny. The third feature is the *irreplaceability of the other*. The person to whom one is bound is not, morally, the bearer of a quantity of value that another bearer of equal quantity could replace without loss; the other is irreplaceable, and the claim the other makes is the claim of this singular one and not of the value it happens to carry [10]. Optimization, whose feasible set is a space of interchangeable options ranked by a common measure, cannot represent irreplaceability at all, since its every option is in principle substitutable by another of equal or greater value; and irreplaceability is precisely the denial that such substitution is ever, here, without loss.

Orthogonality of the optimal and the good. The criterion of the *optimal* and the criterion of the *good* are orthogonal: the first asks whether an option maximizes a given objective, the second whether it ought to be chosen, and success on the first is no success on the second. An optimizing practice, even one well-posed and reaching a genuine maximum, may therefore fail as an ethical practice, and does so wherever the good it maximizes is not the good it ought to honor. Morality resists the optimizing form in particular because of the unconditionality of its requirements, the non-tradability of its considerations, and the irreplaceability of the other, none of which an objective function can represent without falsifying. Morality is therefore not a higher-order optimization, a maximization of some moral quantity, but a practice outside the grammar of optimization. The optimal is not the good.

The completion of the criticism

With this the criticism completes itself, and it does so by closing the last exit the optimizing frame might take. Confronted with the argument thus far, a defender of optimization has one sophisticated move left: to concede that ordinary utility is the wrong objective and to propose that morality itself be optimized, that we maximize not pleasure or preference but the good, folding the moral considerations into a richer objective and maximizing that. This section's claim is what forecloses the move. Morality cannot be the objective of an optimization, because its central features, the unconditional, the non-tradable, the irreplaceable, are exactly the features an objective function cannot carry; to write morality into an objective is to strip it of these features and so to write in something else under its name. The optimizing frame cannot be rescued by aiming it at the good, for the good is not the kind of thing there is a maximum of. And this does not leave ethics without rationality, which would be a disaster of the

opposite kind and which the paper is at pains to avoid. It leaves ethics with a rationality that is not optimization, a way of reasoning about what to do that is answerable, discriminating, and severe without being the maximization of any measure; and the recovery of that other rationality, promised from the start, is the work of the part that follows.

Part Four After the Negation: A Non-Optimizing Relational Rationality

11. Rationality Is Not Optimization: Reclaiming the Word

The paper has denied that intimate relation is an optimization problem and criticized the imposition of the frame; it owes now an account of what relational rationality positively is, and the debt is not optional. To leave the matter at the denial would invite the very reading the paper most wants to refuse: that in surrendering optimization one surrenders rationality itself, and consigns love to mere feeling, to a warm unreason that does as it likes. That reading has force only because a long usage has quietly equated rationality with optimization, until the two words function as synonyms and the space of the reasonable has narrowed to the space of the maximal. The first task of the recovery is to break that equation, and it is a task of reclamation rather than invention, for the equation is a recent contraction of a word that once meant more, and what the paper reclaims was there before optimization annexed the term.

The contraction of a word

That the equation is a contraction and not a definition can be read directly off the genealogy already given. Rationality was not always maximization. Weber's own distinction preserves a rationality of ends alongside the rationality of means, a reasonableness about what is worth pursuing and not only about how to pursue efficiently what is given [24]; and behind Weber lies the far older tradition of practical wisdom, in which the rational agent is not the one who maximizes a measure but the one who perceives well what a situation requires and acts fittingly, whose excellence is discernment and proportion rather than computation. The narrowing of rationality to optimization is the achievement of the particular history the genealogy traced, in which the bracketing of ends, the objectification of the objective, and the axiomatic installation of the maximizer combined to make "rational" mean "maximizing on a scale" and to make anyone who declines the scale, by the completeness axiom, irrational by definition. Once this narrowing is seen as an achievement with a date, its air of necessity dissolves. It is not that reason is optimization and relation therefore falls outside reason; it is that a certain history has annexed the word "reason" to optimization, and an annexation can be contested. The paper contests it, and the ground of the contest is that the older and wider senses were not confusions the narrowing cleared up but competences the narrowing dropped.

Two rationalities, distinguished

The reclamation is best done by distinguishing two things the one word has been made to carry, the rationality that *maximizes* and the rationality that *responds*, and by showing that the second is no less rational for being no optimization. The rationality that maximizes takes a fixed objective and a field of options and selects the option that makes the objective greatest; its virtue is efficiency, its measure the distance to the summit, and its proper home the domain where value is representable, fixed, commensurable, and owned by a stable subject, the domain, that is, where the four conditions hold and the shipping fleet is routed. The rationality that responds takes a situation whose goods are relational, incommensurable, and in part non-representable, and a self still in the making rather than fixed, and it does what the first rationality cannot: it attends to what the situation and the other require, discerns among incommensurable goods without a scale, and acts fittingly rather than maximally, answerable at every point to a demand that comes from without rather than to a total computed from within. This second rationality is not a defective form of the first, an optimization carried out with poor instruments and no clear objective. It is a competence of a different kind, with its own standards of success and failure, its own ways of going right and of going wrong, and its own severity, described in the sections that follow. To call it irrational because it does not maximize is to mistake the annexed sense of the word for the whole of it, and to require that the reasoning proper to relation justify itself before a tribunal whose jurisdiction the paper has denied.

Severity without a maximum

Everything in the recovery turns on one point, which must be insisted on because it is the point the optimizing frame will most resist: that the rationality of response is *severe*, that it has genuine standards and is not a license for whatever one likes. The deepest suspicion of any non-optimizing rationality is that it is merely a soft permission, a way of dignifying caprice by excusing it from the discipline of the measure; and the suspicion is fair, and must be met, for a relational rationality that amounted only to “do as you feel, unencumbered by calculation” would deserve the contempt the optimizing frame heaps on it, and would moreover betray the goods it claims to serve, which make hard demands. The answer is that the rationality of response has a discipline of its own, as exacting as the discipline of the maximum and in one respect harder, since it cannot be discharged by a rule: the discipline of getting the other right, of perceiving the situation as it is and not as one would prefer it, of discerning which among several incommensurable goods this occasion asks to be honored, of sustaining a generation without grasping it. These are standards one can fail, and fail badly. A response can be false, inattentive, self-serving, disproportionate; the difference between a fitting response and an unfitting one is as real as the difference between a right answer and a wrong one, though it is not the difference between a larger number and a smaller. Indeed the case of the optimal betrayal in the previous section was a failure of exactly this rationality, and its being a failure, assessable as such, is the proof that a standard was in force: the man perceived his friend rightly enough to know what was owed, and acted against the perception, and the wrongness

of his act is not a smaller number on any scale but a failure of response that the scale could not even record. The severity is real. It is simply not the severity of optimization. Rationality, reclaimed, is wide enough to hold both the maximizing and the responding; and the reasoning proper to relation is the second, no less rational for owning no maximum, and answerable to standards the first cannot see.

12. The Form of Relational Rationality

The rationality of response has been distinguished from the rationality that maximizes and credited with a severity of its own; it remains to describe its form positively, to say what its operations are, so that it stands as a competence with a shape and not merely as the negation of optimization. Three moments compose it, and they are not stages of a procedure run in sequence but aspects of a single way of proceeding, present together in any exercise of it: response, the answering of a demand that issues from the other; attunement, the perceptual fit to a situation and its goods; and sustaining, the keeping-in-motion of a generation that is not to be grasped. Each is a standard one can meet or fail, and each names a competence the optimizing frame not only lacks but cannot represent, so that describing them is at once to give the recovery its content and to show why the frame it replaces was blind to exactly these things.

Response

The first moment is response, and it names a reorientation of rationality from a total computed within to a demand answered from without. The maximizing agent faces a field of options and consults an objective that is his own; the question he asks is what best serves that objective, and the direction of his reasoning is inward, from the world to his measure. The responding agent faces an other whose claim upon him is not derived from his objective and cannot be, and the question he asks is what this other, this situation, requires of him; the direction of his reasoning is outward, from himself to a demand he did not set and cannot revoke. This is why the ethics of the irreplaceable other is the native home of relational rationality rather than an ornament upon it: the other's claim is precisely a demand that comes from beyond the self's objective, and a rationality of maximization cannot so much as register it, since it appears in no term of any objective the self could hold [10]. Response is answerable in a way maximization is not, and the difference is the mark of its rationality rather than a softness in it. The maximizer answers to his own objective and to nothing else, and so cannot, strictly, get the objective wrong; it is simply his. The responder answers to what is other than himself, and can therefore fail in ways the maximizer has no room for: by failing to hear the demand at all, by hearing it and answering falsely, by substituting his own measure for the other's claim and calling the substitution a response. That these are genuine failures, distinguishable from success, is what shows response to be a competence of reason and not a mood, for only what can be done rightly or wrongly is a matter of reason at all.

Attunement

The second moment is attunement, and it names the perceptual achievement without which response would be blind. To respond fittingly one must first perceive rightly: see the situation as it is, register which goods are truly in play, discern what this occasion, among all the occasions it resembles, distinctively asks. This is the competence the tradition of practical wisdom set at the center of ethics, the trained perception that grasps the salient features of a particular case and is not the application of a rule to a case already described, but the prior and harder work of arriving at the description the rule would need [12]. It is exactly the competence for which the optimizing frame has no place, since optimization can begin only once the situation has been reduced to a feasible set and an objective, and attunement is the labor of reaching a sense of the situation that precedes that reduction and often resists it. Attunement is what allows discernment among incommensurable goods without a scale, and this is its most important and least obvious office. Where the maximizer, denied a common measure, is simply stalled, unable to rank and so unable to act, the attuned agent is not stalled at all: he perceives which good this situation asks to be honored, not by computing a total in which the goods are compared, which is impossible, but by a discernment of the case that sees what it calls for. That such discernment is possible, that people do in fact choose well among incommensurable goods and can tell a wise such choice from a foolish one, is itself evidence that a rationality other than optimization is at work, since the choice is demonstrably not a maximization and yet is demonstrably not arbitrary, being open to praise, criticism, and the judgment that it was rightly or wrongly made.

Sustaining, and an image

The third moment is sustaining, and it names the aim proper to a rationality of response, which is not to reach a summit but to keep a generation in motion. Where the maximizing agent seeks a terminal state, the best point at which the work is done and the objective achieved, the responding agent seeks no terminus, for the goods of relation have their life in continuing and are spoilt by any final reckoning, as the criticism showed at length. The rationality of sustaining is therefore oriented to the ongoing rather than the achieved: its success is that the generation continues, replenished and unpossessed, and its characteristic failure is not falling short of a maximum but letting the generation lapse, whether by grasping it, which settles it, or by neglecting it, which starves it. Here a single image may be allowed, and only as an image. There is an old figure for a strength that does not seek the summit: water, which does not strive upward or contend for the high place, but goes to the low ground others disdain, takes the shape of whatever holds it, and by never contending nourishes all things. The figure catches, better than an argument might, what a non-maximizing rationality is like, its yielding that is not weakness, its finding of the way by fitting rather than forcing, its power that lies precisely in not climbing; and it is offered for that one flash of recognition and then set down, without exposition, since to expound it would be to build an apparatus from what is meant only to light the thought. The form of relational rationality is response, attunement, and sustaining. Each is a standard, exacting and failable; together they are the competence the paper reclaims

under the name of reason, a reason whose excellence is to answer, to perceive, and to keep in motion, and never to maximize.

13. Non-Action as the Highest Rationality

The recovery closes with the moment that reaches furthest from optimization and gives the paper's positive claim its most demanding form: that the highest exercise of relational rationality is a kind of non-action, a knowing when not to intervene, not to force, not to optimize at all, and that this restraint, far from the absence of reason, is its most difficult accomplishment. The claim draws on the notion of *wuwei*, non-action or effortless action, and completes the recovery by naming the competence that even the rationality of response must include: the competence of letting a generation arise rather than making it, of tending the conditions of a good rather than seizing the good directly [9]. It is the sharpest point of the whole positive account, because it is where relational rationality most flatly contradicts the imperative the optimizing frame cannot suspend, the imperative always to close the gap to the maximum.

The rationality of restraint

The optimizing frame knows no restraint of this kind and cannot, for its imperative is always to act, to move toward the maximum, to close whatever distance remains between the present state and the best. Within that frame, inaction is intelligible only as a failure to optimize, a leaving of value on the table; there is no positive place in it for the deliberate refusal to intervene, since any refusal that forgoes an available improvement is, by the logic of the maximum, simply irrational. The rationality of relation has such a place, and it is central rather than marginal, because much of what is best in a shared life arises only when it is not forced and would be destroyed by the very intervention that sought to secure it. Trust that is demanded is not trust; spontaneity that is engineered is not spontaneous; a tenderness produced on purpose in order to produce it is something other than tenderness. For goods of this kind, and they are the characteristic goods of intimacy, the fitting exercise of reason is often to refrain: to make the space in which the good can arise of itself, and then to leave it be. And to know which goods are of this kind, and when the space has been made, and how to keep from the intervention that would spoil them, is a discernment as exacting as any the previous section described, and in one respect harder, since it must be exercised against the standing impulse to do something, to help, to secure, to optimize. This is the rationality of restraint, and it is not the abdication of reason but its refinement, the point at which reason grows wise enough to know the limits of its own doing and to recognize that some goods are available only to a hand that does not grasp.

Letting the good cycle arise

The series has given this restraint a precise place before, and recalling it shows that the figure of non-action is not an exotic import brought in to decorate the ending but the name of a claim the argument has carried throughout. In the account of the good and the bad cycle,

the good cycle was shown to be one whose positive accumulation is *endogenous*, arising from the internal tension of the relation itself rather than pumped in by extraction from without; and non-action was there identified as the stance that neither extracts nor forces closure, that lets the endogenous accumulation occur of itself rather than manufacturing a false increase by drawing on some outside [19]. The same identification holds here and completes the argument of the present paper by joining its end to its middle. To optimize a relation is to intervene upon it, to act upon it as upon a system to be driven toward a maximum; and this intervention is exactly the forcing the good cycle cannot survive, since it substitutes an external drive for the internal generation and yields, at best, a manufactured increase that depletes what it draws upon, which is the very extraction the criticism of the third part described. The rationality of non-action is the refusal of this intervention: the tending of the conditions under which the relation generates value of itself, and the restraint from the optimizing action that would replace that self-generation with an extraction. What the maximizing frame reads as leaving value on the table is, seen rightly, the only way the value in question is ever had at all, since it is value that arises only where it is not seized, and the hand that reaches to maximize it closes on the diminished thing its reaching made.

The measure that is not the maximum

The deepest form of the paper's positive thesis can now be stated, and it is fitting to end the recovery on it. Optimization takes its measure from the maximum: the standard against which every state is judged is the best attainable state, and reason's task is to close the distance to it. A rationality of the kind this part has described takes its measure elsewhere, from what a situation and an other are of themselves, from the grain of the thing and the movement it already has; and reason's task, on this measure, is to accord with that movement, to sustain and not force it, to tend and not seize, rather than to override it toward a maximum defined apart from it. This is the deepest sense in which optimization is neither the form of relational rationality nor the law of the world. The world of relation does not present a landscape with a summit that reason should climb. It presents a generation with a movement of its own that reason should discern and accord with; and the highest rationality is not the one that reaches the highest point but the one that accords most truly with what is there, that knows when to act and, harder, when not to, and finds in restraint not the failure of reason but its fulfillment. With this the recovery is complete. Relational rationality is response, attunement, sustaining, and, at its height, the non-action that lets the good arise of itself; and none of these is a maximization, and every one of them is reason.

Part Five Close

14. The Polyphonic Conclusion

It remains to close, and the manner of the closing is not incidental to the argument but its last step. The paper has denied that intimate relation is an optimization problem, criticized the imposition of the frame, and recovered a rationality of response, attunement, sustaining, and non-action. A reader who has followed this far will feel the pull of a single question, and the whole of the close turns on how it is answered: if not utility, then *what* should one optimize? Love, perhaps, or meaning, or generativity itself? The temptation to answer is strong, and it is strong for a reason worth naming, since the reader has been trained by the very frame the paper opposes to expect that a serious argument ends by supplying a new objective to put in the place of the one it rejected. An answer would round the paper off in the shape the frame has taught us to find satisfying, replacing the discarded objective with a worthier one and leaving the machinery of maximization intact but redirected. The paper refuses the answer, and the refusal is not an omission or a failure of nerve but the final content of its view.

The surrender concealed in naming a new objective

The temptation must be met head-on, because to yield to it would undo everything the paper has argued, and would undo it quietly, wearing the look of a constructive conclusion. To say “do not optimize utility; optimize love” is to keep the entire apparatus the paper has dismantled, the objective, the scale, the maximum, the optimizer, and merely to change the argument of the function. But the four impossibilities were not impossibilities about *utility* in particular. They were impossibilities about the optimizing form as such, brought to bear on intimate relation: that its goods resist representation, admit no exterior standpoint to fix them, share no common scale, and belong to no subject stable enough to own the objective. Not one of these failures is touched by a change of objective. Love, written as the argument of J , is as non-representable, as relational, as incommensurable, and as owned-by-no-stable-subject as any other relational good; to make it the thing maximized is to inflict upon it precisely the damage the criticism described, rendering the circulation a settleable quantity and drawing it off in the reckoning. The offer to optimize love rather than utility is therefore not a friendlier version of the optimizing frame but the same frame with a more sympathetic mask, and it does the same harm to a more beloved object; indeed it does the harm more surely, since the reverence in which love is held makes the reckoning feel like devotion and disarms the suspicion that would have attended the reckoning of mere utility. To accept the offer would be to lose the argument at the last step, having won it at every prior one. The paper therefore declines to name a master objective, not from an inability to think of one, but from having understood that any objective so named would reinstate the error the whole paper exists to expose.

The plural and the unsynthesizable

What stands in the place where a master objective would go is not a blank but a positive thesis, and it is the thesis the series has reached before by other roads: that the goods and the rationalities of relation are plural, and that their plurality admits no synthesis into a single measure without loss. There is no one thing that relational rationality maximizes, and this

is not because the one thing has yet to be found but because there is none to find. There are, rather, many goods standing to one another in relations no common scale represents, and many aspects of the reasoning that honors them, response and attunement and sustaining and restraint, that do not reduce to a single operation performed on a single objective. This is the counterpart, in the theory of rationality, of the polyphonic form the series has given its conclusions since the paper on sustainability, where it was argued that the truth of a matter may lie in the tension among several frameworks none of which subsumes the others, and that to force them into one synthesis is to lose exactly the truth that lived in their irreducibility [19]. The refusal to name a master objective is that same refusal carried to the level of value: an insistence that the many goods and the many modes of their honoring are not to be collapsed into one, and that the collapse, however it satisfies the desire for a single answer, destroys what it unifies. The plurality is not a stage on the way to a unity not yet achieved. It is the finding.

The form as the argument

That the paper enacts this refusal rather than merely asserting it is the last thing to say, and it is what binds the paper's form to its content in the manner the series requires of itself. A paper that argued against the single measure and then, in its conclusion, supplied one, would refute itself in its form whatever its sentences maintained; the shape of its ending would betray the burden of its argument, offering with the closing gesture exactly the master objective the body had shown to be impossible. This paper ends instead by declining the measure, and the declining is meant to be read as the argument's completion and not its evasion. The most honest thing a work against optimization can do at its close is to withhold the new optimum the reader has been trained to expect, to leave the plurality unsynthesized on the page, and to let the absence of a master objective be felt as the presence of the thesis. The reader who reaches the end and finds no single answer to "what, then, should one optimize?" has not been failed by a paper that lost its nerve before the constructive task. He has been given the answer, which is that the question, in this domain, has no answer of the kind it asks for, and that to have felt the want of one and let it stand unfilled is to have understood. The form withholds the summit because there is none, and the withholding is what the paper had to say.

15. Envoi: A Promise That Is Not Optimized

The argument has run its course, from the anatomy of the optimizing frame, through the four impossibilities that show it ill-posed in intimate relation, through the criticism of its imposition, to the recovery of a rationality that responds rather than maximizes. It remains to close as the series closes its papers, not with an argument but with an image, and to return, as the paper began, to the plainest form of the thing it has been about.

Consider a promise. Two people bind themselves to one another for a life, and in doing so they perform an act the optimizing frame cannot understand. The frame would have them compute: to weigh the expected value of the bond against its alternatives, to keep the option of revision open should a better prospect appear, to treat the vow as a provisional maximum

held only until the numbers change. A promise made in that spirit is not a promise but a standing intention to defect when it pays, and everyone knows the difference, though the frame cannot state it. For a promise is precisely the refusal to keep computing. It is the act by which one closes the ledger, forecloses the revision, and binds oneself past the point where the calculation could reach, saying not “I will stay while you remain the optimal choice” but “I will stay,” full stop, whatever the sums come to say. The whole worth of a promise lies in its being unconditional in just the way an optimization can never be, and the series has argued elsewhere that this unconditionality, far from a weakness, is the very source of the trust a promise can generate, since it is the mark that the one who promises has placed the bond beyond the reach of the calculation that could betray it [21].

This is why a promise is a promise only when it is not optimized, and why the attempt to make it so destroys it in the same motion by which the pricing destroyed the friendship and the maximizing settled the circulation. To ask, of the one you have bound yourself to, whether she is worth it, to hold the vow open against the day a better yield appears, is not to be a more rational lover but to have stopped promising and started calculating, and to have lost, in the calculating, the very good the promise was. The good of the promise is available only on the far side of the refusal to compute its worth; it is a good one can have only by declining to ask the question the optimizing frame insists is the rational one. And so the deepest thing the paper has to say is said not by its arguments but by this plainest of acts, in which one human being says to another that here the question of worth will not be asked, not because the answer might be unwelcome but because the asking would already be the betrayal. There are goods a love does not maximize, and it is not for want of a better measure. It is because to have reached for the measure at all would have been to have loved something other than the one before you, who is not a quantity of value that a greater quantity could replace, but this one, irreplaceable, whom one does not weigh. 未曾计算，故其爱得全—never weighed, and so the love is whole; which is to say, a promise, and not a sum.

Acknowledgements

Two debts frame this paper, and it is fitting to name them together at its end, for one gave it its question and the other its reason, and between them they enclose everything the paper contains.

The question with which the paper begins, whether optimization is really a law of the universe, came from an exchange with Ron Eglash, in the course of a longer conversation on the political economy of value and the theory of generative justice. It arrived in a form so plain that its force took time to register, and its whole work was to move optimization from the place of an unexamined procedure to the place of a thesis that might be false. Everything the paper is followed from taking that displacement seriously. Beyond the question, the theory of generative justice developed in exchange with Eglash supplies the criticism of its third part with its central concept, the distinction between value that circulates and returns to its generators and value that is drawn off and settled elsewhere, without which the account of the damage optimization

does could not have been given [3]. Where the paper has reasoned well, the debt is his; where it has reasoned poorly, the fault is the author's alone.

The other debt is older and needs no argument. This paper, like every paper of the series, is for the girl who belongs to the forest, whom the author has never once weighed for whether she was worth it, because that was never a question one could compute. If the acknowledgement to Eglash records where the question came from, this one records for whom the whole was written; and it is not beside the point of the paper but its plainest confirmation, for a bond that refuses to be priced, that is held past every reckoning and never put to the calculation of its worth, is the nearest witness there is to the thesis these pages have labored to establish, that there are goods a love does not maximize, and that it is not for want of a better measure. 致我最爱的人。 To the one I love most.

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