

Austen Equilibrium

IT IS AT LEAST IRONIC that the characters and narration of Jane Austen's *Emma* articulate excessively their preference for verbal and temporal economy. Clever Emma, who admires Mr. Martin's proposal letter to Harriet for being "strong and concise; not diffuse," observes later that charades "in general cannot be too short."¹ And at the end of dinner at Randalls, "while the others were variously urging and recommending, Mr. Knightley and Emma settled it in a few brief sentences" (122). It might surprise us that at the novel's turning point, "a few minutes were sufficient for making [Emma] acquainted with her heart" (382), were it not the case that by this time, we have already heard the phrase "half a minute" ten times.

Aversion to waste and surplus takes perhaps its most glaring form in the frequency of the expression "to throw away." When it appears outside dialogue, the phrase is always either ironic or negated. Suspicious Emma thinks Jane's "caution was thrown away," but that discretion successfully conceals the secret engagement to Frank (158). And we know that Mr. Elton, who arrives at Mrs. Bates's house "so hot and tired that all [Mrs. Elton's] wit seemed thrown away" on him, rather escapes than misses out on any so-called "wit" (429). The phrase's early appearance teaches us that "danger" in *Emma* will be posed not by murder or intrigue but by waste, for "by Mr. Elton, a young man living alone without liking it, the elegancies and society of Mr. Woodhouse's drawing room . . . were in no danger of being thrown away" (21). Incessantly, as if anxiously, the narration provides confirmations of safety from such danger: "The anxious cares, the incessant attentions of Mrs. Weston were not thrown away" at the Crown Ball where Mr. Knightley's dancing "was not thrown away on Harriet" (306, 307).

The threats of waste here arrive in packages that announce the emptiness of their contents, assuring us that we can throw them away. But the

ABSTRACT By proposing a quantitative game-theory model of the marriage plot in Jane Austen's *Emma*, this essay demonstrates that free-market moral philosophy underwrites Austen's representation of matrimony and key formal elements of her writing—particularly, matters of verbal profusion. Her famed stylistic "economy" is revealed to be structured by the emerging capitalist economy that Adam Smith theorized in *The Wealth of Nations*. Establishing the correspondences among several kinds of economy, the essay unites economic and formal approaches to Austen's work. REPRESENTATIONS 143. Summer 2018 © The Regents of the University of California. ISSN 0734-6018, electronic ISSN 1533-855X, pages 63–90. All rights reserved. Direct requests for permission to photocopy or reproduce article content to the University of California Press at <http://www.ucpress.edu/journals.php?p=reprints>. DOI: <https://doi.org/10.1525/rep.2018.143.3.63>.

possibility of waste is less easily dismissed when it threatens human beings. “Oh! But, dear Miss Woodhouse! [Jane] is now in such retirement, such obscurity, so thrown away. Whatever advantages she may have enjoyed with the Campbells are so palpably at an end!” (263). Here in passive voice, “thrown away” leaves unspoken the truth to which Mrs. Elton alludes, but like every Austen reader, she knows that future “advantages” can await Jane only in the right marriage. Indeed, a person’s safety from being thrown away in *Emma* is always constituted by an appropriate submission to the conjugal imperative—“appropriate” meaning something particular to each spouse. When Mr. Elton leaves Highbury to find a wife and returns with Mrs. Augusta Elton, we learn that “the story told well: he had not thrown himself away” (170). If the story of *Emma* tells well, perhaps it too avoids waste—perhaps for it, as for the snubbed Harriet, “to know that [Mr. Elton] has not thrown himself away, is such a comfort!” (252). Aversion to waste, especially within and surrounding the dominating context of marriage, would supersede or at least equal aversion to anything else.

Like the marriages that occur over the course of the novel, the parts of this argument number four. Part 1 applies the methodology of quantitative economics to model the dynamic between waste aversion and marriage in *Emma*, illustrating how its ending is a demonstrable utilitarian ideal. This illustration undergirds part 2, which argues that *Emma* advances the moral philosophy underlying the capitalist outlook that classical political economy began to theorize in the years leading up to the novel’s publication. Part 3 reveals the entwining of political economy with economy of language, explaining how the novel’s concision works in tandem with its verbosity to iterate qualities of the free market that are in tension with the standards of maximum utility highlighted by the model. Whereas parts 2 and 3 rely primarily on the model’s conclusions, part 4 considers the model’s form, using it to understand the relation between the temporality and referentiality of the novel’s discourse.

The novel suggests several economies and numerous exchanges and congruities among them. There is first *the* capitalist economy as understood in the political economic theory that, as part 2 argues, informs the novel’s moral philosophy—a region’s system of producing and consuming goods and services. That economy has both a homologue and an analogue within the novel. The homologue is a conjugal economy that is composed of putatively rational actors seeking to maximize marital satisfaction. The analogue is a verbal economy involving the allocation of lexical efficiencies and inefficiencies (concision and diffusion). The nexus among these three economies is “economy” without an article: waste aversion, the result of economizing or being economical. Within both the homologue and the analogue of *the* economy—each one *an* economy—arise *instances of*

economy. And, as parts 2 and 3 elucidate, it is the very nature of these instances that enables each economy not only to act as a parallel of the other and of the capitalist economy but also to iterate and advance capitalism's dynamics and moral philosophy. Finally, underlying the entirety of the novel's discourse and significantly modulating its free-market argument is a particular management of narrative speeds—what part 4 refers to as a temporal economy.

The very singularities of *Emma* that allow the perception of these economies also render it the quintessence of interrelations among economies and economics throughout Austen's oeuvre. What emerges is a distinct and comprehensive account of Austen's relation to contemporaneous economic theory (a relation much debated and theorized), of economy in her verbal and narrative style (much presumed and relatively little theorized), and of the correspondences between these two phenomena. Some of *Emma's* singularities also help to delineate the entwinement of capitalist values with formal characteristics of the novelistic form generally. Likewise, the application of economic methodology to understanding Austenian economy evinces the potential of quantitative modeling to illuminate the forms and philosophies of literary texts.

Part 1: Quantitative Economics

Emma is singular among Austen's novels for containing no eligible person who is unmarried by the end. The novel's plot, in reduction, brings about four marriages out of eight people, and the artistry of this finale lies in its staging as the result of a process that continually suggests and eliminates alternate finales. Harriet eventually marries Mr. Martin, but not before we have considered her with every other eligible bachelor—Mr. Elton, Frank Churchill, and Mr. Knightley. Mrs. Weston considers Jane with Mr. Knightley and Mr. Elton considers Emma with himself. Because the alternate engagements continually threaten to leave someone unmarried (for example, if Mr. Knightley marries Harriet, there is no one appropriate for Emma to marry), they help frame the novel's conclusion as an achievement of economy: no one's procreative value is thrown away. This progression, its final achieved economy, and the economical limit on the number of characters who participate in it, suggest the structure of a game.

What is the precise nature of this "game"? Critics like Wayne Booth and A. Walton Litz see Mr. Knightley as the ultimate prize rewarded to Emma for winning the game of moral growth. In disagreement, Frances Ferguson writes that "marriage would simply be one game among others" only if "every man would want to marry Emma, and every woman Knightley," and that Austen

would then be “writing out a utilitarian calculus in the form of a novelistic plot.”² Like Booth and Litz, Ferguson limits the meaning of “game” to a competitive system that has only one winner. But if we understand games as capable sometimes of producing multiple winners—games in which the objective everyone has in common is not a specific outcome but a specific *type* of outcome—then not only is *Emma*’s plot a game; it is also demonstrative of a complex “utilitarian calculus.” The common objective is not to marry a specific person but to marry as well as one can according to one’s preference order, given the constraints of everyone else’s preference orders.

It is a game of the kind studied by game theorists. This observation might have appeared in political scientist Michael Chwe’s book, *Jane Austen, Game Theorist*, but, despite its title, that work does not conduct game-theoretical analyses of Austen’s novels. It recruits from the modern discipline of economics not its methodology but some of its foundational concepts, like opportunity cost and marginal utility, which are sometimes addressed by Austen’s narrators and characters.³ Here, I use game-theoretical techniques of visualization and conceptualization to analyze the novel’s architecture.

Game theory itself, “the rigorous analysis of situations of strategic interdependence,” is practiced by the novel’s very design.⁴ “Strategic interdependence” undergirds this multimarriage plot: the pairings are interdependent, each one embedded in a context that includes six other characters, all of whom are eventually aware of and therefore have various degrees of preference for one another; meanwhile, the players are strategic in the game-theoretical sense of being constrained—in this case, by the prohibition against marrying more than one person and against choosing a spouse unilaterally, without considering the preferences and choices of others.

The novel’s design and conclusion together resemble the Gale-Shapley algorithm for the “stable marriage problem.”⁵ It describes a sequence involving n number of men and n number of women who rank the others by preference and engage in a systematized “proposal” sequence designed such that everyone becomes paired and no two people of opposite sex prefer each other to their partners.⁶ Of course, *Emma* does not feature the full information and systematic iterations of the algorithm. But the four marriages that develop over the course of the novel are “stable” in terms both novelistic and mathematical. This is ensured and displayed by a plot sequence in some sense algorithmic, progressing through the proposition and rejection of suboptimal matches across an even and limited number of individuals.⁷

But game theory, beyond providing the example of specific studies like that of Gale and Shapley, can also offer representational tools. Particularly suitable to *Emma* is a normal form matrix, which organizes and displays all the conceivable choices and corresponding payoffs available to players in a game (see table 1).

TABLE 1.
Marital Preferences in *Emma*

	Emma	Jane	Augusta	Harriet
Mr. Knightley	3,3	1,?	0,2	0,3
Mr. Churchill	?,1	3,3	?,2	?,1
Mr. Elton	3,0	0,?	2,2	0,2
Mr. Martin	?,0	?,?	?,0	3,2

The first value in each square describes the man's attitude toward (or "payoff" from) the potential wife, and the second value describes the woman's attitude toward the potential husband.

? = insufficient textual evidence

0 = would not marry (absence of preference is articulated or implied)

1 = might marry (not prevented by a seemingly fixed attribute [e.g., wealth])

2 = would marry (a preference is articulated or implied)

3 = most preferred (no one is more preferred)

Similar to Franco Moretti's character network maps, in which the dramatis personae of *Hamlet*, for instance, are transformed into points on a blank two-dimensional plane with lines connecting those who address each other at any point in the play, this model too is the result of a "process of reduction and abstraction" that results in something like "an x-ray" of the text.⁸ But among this model's many differences from Moretti's is that the text seems closer to requisitioning it by both form (a limited, even number of characters, equal parts men and women) and content (a plot of strategies, matchings, and rematchings—*Hamlet* is not, in parallel, explicitly interested in or dependent structurally on networks as such).

The numbers are based on stated or implied marital preferences or general values. For example, we can safely suppose from Mrs. Elton's obsession with "Mr. K's" property and her jealous criticism of Emma's "shabby" wedding that she would gladly accept him and reject Mr. Martin. The model extracts the raw material of personality and preference with which the novel generates its story and results, and it imagines this material unbound from the novel's many temporal and spatial qualifications. For example, it deems irrelevant the fact that Jane and Mrs. Elton encounter everyone else after

they are already engaged or married to their partners, whom they first encounter away from Highbury. Indeed, the model sifts out the substance from its (con)textualization and views it at a remove from its gradual exposure to the characters and to us. As with the character networks, this model too is what Moretti describes, using Alex Woloch's terms, as "time turned into space: a character-*system* arising out of many character-*spaces*" (215). But unlike those networks, which reference every moment in the narrative timeline at once, this matrix seems to depict a "moment" outside the timeline: it is a snapshot dealing not so much in simultaneity as omnitemporality.

It would be controversial to create a single such model for some novels. But just as *Emma's* specific design *invites* the matrix, so does its conception of character *allow* it. This is because character in *Emma* is always conceived as intrinsic: any apparent shifts in preference over time are always staged as truth discoveries. If Harriet had only experienced Mr. Knightley's generosity sooner, she would have preferred him sooner. And when Emma's preference for him seems to become a "3," she finds how significant he "had always been" (389). Part 2 will further discuss character development and fixity, and the tension between the model's atemporality and the temporal dynamism of (con)textualization will be addressed in part 4. Here, we may simply note the overall presumption of character immanence that justifies this ascription of stable numerical values to preferences.

The final marriages constitute what game theorists would call the best possible solution to the game, and by not just one but three different measures. Most obviously, the solution constitutes what is called a Nash equilibrium, a solution in which no player can benefit by a unilateral deviation in their choice. Since any player's unilateral deviation here would mean singlehood (because everyone else, with their choices held constant, would be married and unavailable), and since marriage in Highbury is always ultimately preferable to no marriage (even to the skeptical Mr. Woodhouse), unilateral deviations within this solution would inevitably be unprofitable.⁹

Slightly less obviously, the outcome of *Emma* can also be described as Pareto optimal, because no one can be made better off without making someone else worse off. We see this clearly thanks to the numbers, which not only help us to assess relative preference but also can act as measures of relative personal satisfaction. In the solution, not every spouse's satisfaction is absolutely maximized. For example, it is only given the constraint of Emma's "3" with Mr. Knightley that Mr. Elton's "2" with Mrs. Elton is optimal. In a perhaps more ideal situation, all the marriages would be "3,3" and all the potential engagements would be "0,0"—every spouse preferring their own significantly over, or as if in isolation from, all others. But the numerical variation here pays homage to the structural cooperation and competition that renders this particular Pareto optimality—made plain by the numerical

values—so remarkable, as it occurs in a landscape that is constrained by interdependence and that is therefore intricate both socially and narratively.

It would not be anachronistic to let this satisfaction go by the name of “utility,” for though “utility maximization” is now associated with neoclassical economics—whose modern approaches include game theory—it was used by Jeremy Bentham in the years leading up to *Emma*. Helping to create, and writing within the budding field of, political economy, he described utility as “that property in any object, whereby it tends to produce . . . happiness . . . to the party whose interest is considered: if that party be the community in general, then the happiness of the community: if a particular individual, then the happiness of that individual.”¹⁰

The model allows for the assessment of individual and communal happiness separately and together. If each number in the model can represent the relative utility enjoyed by each individual, their sums within each box represent the relative happiness produced by each engagement (Jane and Frank’s is a “6,” Mr. Elton’s is a “4,” and so on). And when we compare satisfaction across real and potential couples, we see that the achieved four are the highest of the potential sixteen in relative utility. We may go further and assess the total happiness of the community, calculating it with Bentham’s precise formula: “The community is a fictitious *body*, composed of the individual persons who are considered as constituting as it were its *members*. The interest of the community then is, what?—the sum of the interests of the several members who compose it” (emphasis in text).¹¹ Since the four marriages are the highest in relative utility, their total sum (6+6+4+5) represents the greatest possible happiness for the group given the raw material of their preferences. As the best of all possible outcomes, it exemplifies Bentham’s utilitarian ideal of the “greatest happiness of the greatest number”—a phrase he first used in the preface to his 1776 *Fragment on Government*, published the year after Austen’s birth.¹²

The model thus displays the extent to which the novel’s conclusion embodies a certain social ideal—at once throwing no one away and maximizing individual and communal utility within the limits of interdependent and constrained preferences and resources. It represents the type of solution that game theorists and other economists aim to discover when faced with a game or problem, and it likewise represents the aim of social organization and governance as envisioned by the classical political economists of Austen’s era.

Part 2: Political Economy

The presumable aims of modern game theorists and classical political economists are and were, respectively, to understand and recommend the

procedures that would lead to such results. Some of their basic beliefs are also shared. For example, traditional game-theory models assume that players are rational and self-interested, and this belief was prevalent in classical political economy's understanding of human behavior in economic contexts.¹³ It was especially central to laissez-faire economics from its earliest formal theorization. Government intervention in the economy should be minimal, restricted to the protection of freedom, because the interest of the community will arrive by the mostly unrestricted competitiveness of individuals—a competitiveness inherent to their nature. The general principle of “self-interest leads to collective interest” is still, of course, one of the central justifications of free-market capitalism. And I will argue that this economic philosophy is espoused by *Emma* as a moral one.

The argument will depend partly on complicating the dominant interpretation of the novel as a story primarily of moral character improvement. The tide of Austen criticism Eve Sedgwick excoriated “for its unrelenting exaction of the spectacle of a ‘Girl Being Taught a Lesson’” has long since turned, but the interpretation persists that the novel's pivotal point and primary plot arc involve the diminishing rather than the crystallization of Emma's egotism.¹⁴ The acceptance of her evolution has not been balanced by equal attention to the nature of her fixity, and this has meant an incomplete picture of the relation between Austen's moral philosophy and that of classical political economy, as represented, for example, by its putative father, Adam Smith.

Among the many critics who have read Austen against the backdrop of Smith, the general consensus is that she certainly read *The Theory of Moral Sentiments* and probably did not read *The Wealth of Nations*. Largely overlooking the moral philosophy undergirding the latter, criticism tends toward finding parallels between Austen and the former, particularly on issues like vanity, pride, sympathetic identification, and the impartial spectator, often in relation to the financial circumstances of characters.¹⁵ Elsie Michie, for example, argues that the evolution of rich women in Austen's novels, from the selfish Lady Catherine in *Pride and Prejudice* to the more likable Emma, shows a growing agreement with the early Smith that the rich could, would, and should be unselfish. Michie writes:

It is in volume three of *Emma*, when Emma teases Miss Bates at Box Hill, that Austen represents self-interest in its purest, simplest, and most universal form, the desire simply to be the center of attention and to ignore the feelings of others. This is what Smith calls self-love, the impulse intensified by commerce that has . . . an implicit violence that we can only recognize through sympathetic identification with the individuals our egotism injures. . . .

. . . The sequence of interactions [Emma] has with Harriet Smith, Jane Fairfax, and Miss Bates teach her to think less well of herself. . . . Describing herself as having

caused “pain and humiliation” to Harriet Smith, as “having stabbed Jane Fairfax’s peace in a thousand instances,” and as having been “so brutal, so cruel to Miss Bates!” Emma begins to use her imagination to conceive sympathetically what others feel rather than to impose her own self-interested desires on them.¹⁶

In these examples, Emma certainly displays more self-awareness and empathy than before, but we might note that this display never comes at the *cost* of her self-love or self-interest. Instead, they are always consistent with it: the harmful behavior she regrets has also always harmed herself. Her delusions about Mr. Elton open the door to his painful and offensive proposal to herself, and the Box Hill insult invites Mr. Knightley’s chastisement. Likewise, Emma’s generosity toward Jane does not appear until the precise moment that Jane accepts a governess position such that her relative social failure and imminent departure from Highbury are definite—until, that is, Jane seems to have lost and been eliminated from any competition as Emma’s potential rival. Indeed, Emma’s change of heart is wholly contingent upon her relative victory: “This picture of [Jane’s] present sufferings acted as a cure of every former ungenerous suspicion, and left her nothing but pity” (355). By no accident is the *entirety* (“nothing but”) of Emma’s feeling concentrated in the word “pity,” the generous impulse inseparable from self-satisfaction and a comfortable certainty about one’s advantage. Austen’s moral philosophy may align, then, as much with Smith’s ideas in *The Theory of Moral Sentiments* as with what “Das Adam Smith Problem” would call his contrary idea in the economic argument of *The Wealth of Nations*: the human impulse to think and act self-interestedly need not be curbed.¹⁷

I would argue that the greatest-happiness-for-the-greatest-number utilitarian ideal represented by the final preferences and marriages of *Emma* is staged as depending most fundamentally on the activation not of Emma’s sympathy but of her self-interested competitiveness. This is partially suggested by the fact that the outcome, which turns on Emma’s sudden wish for Mr. Knightley “to marry no one but herself,” is catalyzed by her discovery that he might want to marry Harriet (382). But what is merely inference in that instant seems explicit in the novel’s subsequent elaboration upon the change. Here is the opening, for example, of the chapter immediately following Harriet’s revelation—volume 3, chapter 12:

Till now that she was threatened with its loss, Emma had never known how much of her happiness depended on being *first* with Mr. Knightley, first in interest and affection. . . . Long, very long, she felt she had been first. . . . She had herself been first with him for many years past. . . . Could she be secure of . . . his never marrying at all, she believed she should be perfectly satisfied. (389, emphasis in text)

Without these details about Emma’s psyche, Harriet’s provocation of the marital preference discovery might seem like a case of triangulated desire,

and most critics appear to see it this way. But any question of desire seems problematized by two things: first, by Emma's continued comfort with Mr. Knightley's "never marrying at all"; second, by the quadruple appearance of the word "first," repeated twice in the first sentence alone, where it even enjoys the italicization relatively rare in Austen. As the word surrounds and overwhelms that tiny and grammatically dispensable phrase indicating romantic inclination, "with Mr. Knightley," it is difficult to deny the subordination of the romantic to the strategic—the deciding supremacy, in fact, of the ludic: the game-theoretical drive that threatens Emma with "loss" and activates her wish to stay in competitive "*first*" place.

Marriage presents a situation in which the drive to marry anyone is inherently competitive because there can only be one winner of any given hand. And far from suppressing this harsh truth, the novel emphasizes its specifically cold and uncompromising nature. It is featured, for example, during the climactic scene of Mr. Knightley's proposal, in which Emma brutally realizes that "Harriet was nothing; that she was every thing herself" (403), and we learn that, "as to any of that heroism of sentiment which might have prompted her . . . to refuse him . . . because he could not marry them both, Emma had it not. . . . No flight of generosity run mad, opposing all that could be probable or reasonable, entered her brain" (403). The tone and style of this passage seem to indicate represented thought, and its first sentence at least could very well be a free indirect transcription of Emma's mental discourse. But this cannot be the case with the second sentence. Since the assessment of generosity as improbable and unreasonable does not *enter* Emma's brain, it cannot *emerge* from it either. The assessment must therefore belong to the narration.¹⁸

The significance of this moral outlook is already suggested by its figuring so centrally within the novel's central figure. But it seems indisputable when we consider that though the example of Emma is the most foregrounded, she is only one of multiple cases in which what one might call (in the language of both game theory and the novel) "rationality" is presented as antithetical to self-sacrifice and instead consistent with self-interestedness.¹⁹ The chapter that begins with the importance of being "first" ends with Emma's belief that, now that she sees clearly, "every future winter . . . would yet find her more rational" (396). But as early as volume 1, we hear the authoritative Mr. Knightley declare that "Elton may talk sentimentally, but he will act rationally. . . . I am convinced that he does not mean to throw himself away [by marrying Harriet]" (54). And the quality extends from the elite Emma and the middle-class Mr. Elton down to the socially and economically subordinate Harriet. Were it not the case, after all, that she already possessed the seeds of self-interestedness, it would not be so easy for her preferences to be reconfigured by Emma so that the sentimental

affection for Mr. Martin grew inferior to the more self-loving wish to maximize success by pursuing the progressively more “superior” bachelors, Mr. Elton and Mr. Knightley (380).

The novel thus seems to propose, with game theorists, that self-interestedness is universal and natural. Moreover, like proponents of laissez-faire economics, it seems to suggest that with self-interestedness in place, the world can be left to regulate itself toward optimal aggregate outcomes. No *deus ex machina*—government intervention—steps into the diegetic universe to provoke the happy ending; it follows from everyone’s essential egotism. The “first” that appears all over the opening of volume 3, chapter 12, is not a precipitous convenience; it is a recapitulation of Emma’s thinking much earlier at the Crown Ball where Mrs. Elton was given precedence because she was a new bride. “Emma must submit to stand *second* to Mrs. Elton. . . . It was almost enough to make her think of marrying” (305, emphasis added). Indeed, crucial to the novel’s illustration of self-regulation is Emma’s fixity: when the time comes for her self-interestedness to lead directly to the best possible aggregate outcome, she does not need to become or to be made self-interested by some intervention from without her preexisting diegetic environment. And it is essential that this immanent egotism is stoked by an in-universe competitive force—one belonging to her fellow character, Harriet. Austen designs a world in which it is not the human capacity for generosity and growth but instead the very opposite—the capacity for self-interest and fixity—that can take care of human society without intervention.

To summarize, the narrative foregrounds the discovery of Emma’s preferences—the “3” for Mr. Knightley—that makes possible the final maximizations: by effecting her marriage, it produces the Nash equilibrium, preventing the throwing away not only of her procreative value but also that of Mr. Martin (rendering his marriage inevitable because Harriet’s economic circumstances require her to marry someone and she can no longer hope to marry Mr. Knightley). And in Emma’s preference being no smaller number than “3,” the pivot allows the outcome to be described as Pareto optimal. That the utilitarian optimization is staged as a direct result of the immanence and self-regulation of competitive self-interest suggests that *Emma* is a novelization of the moral philosophical outlook of laissez-faire economics.

The suggestion complicates our critical picture of Austen’s relation to Smith and his “invisible hands.” The plural seems appropriate since the “invisible hand” in *The Theory of Moral Sentiments* implies something almost the reverse of that in *The Wealth of Nations*. In the former, it restrains the greed of the rich, who, consuming as much as the poor and not requiring all they have, are guided by its altruistic influence to redistribute resources

more equitably.²⁰ Such a hand seems operational in the Woodhouse practice of distributing surplus food to the poor, a detail of the novel that confirms the argument of critics that Austen's relation to Smith is best understood through the lens of *The Theory of Moral Sentiments*. But it is the moral outlook underlying the invisible hand in *The Wealth of Nations*—in the hand's later capacity as the symbolic justification of a free-market economy—that applies to Emma's social choices and outcomes. Following the psychology of a Smithian merchant investing in the domestic economy, she “intends only [her] own gain, and [she] is in this, as in many other cases, led by an invisible hand to promote an end which was no part of [her] intention.”²¹ Thus, perhaps counterintuitively, though the novel's economic behavior and allocations of material resources may evoke the invisible hand in *The Theory of Moral Sentiments*, the novel's moral sentimental behavior and arrangements evoke the invisible hand in *The Wealth of Nations*.

Consideration of *The Wealth of Nations*—the clearest and most pervasive articulation of free-market moral philosophy at the time of Austen's writing—is important to any consideration of capitalism in her work. Though we cannot be certain that she read Smith's vastly influential text, the design of *Emma* strongly suggests her familiarity with it. Indeed, the cultural power of Smith's most significant psychological premise seems to have extended from the perception of behavior in a market economy to the representation of conduct in a conjugal one.

Part 3: Verbal Economy

We have seen twentieth-century economics help illuminate eighteenth-century political economy's pervasion in this nineteenth-century novel's story. We will turn now to the relation between the economic philosophy and the economy of and within the novel's language.

Austen criticism and commentary abound with references to a taken-for-granted waste aversion in Austen's art. An emblematic instance appeared in the debate between Michael Chwe and William Deresiewicz following the latter's critique of *Jane Austen, Game Theorist*. Chwe defended his claim that Austen was consciously interested in game theory by citing Mrs. Weston's analysis of Jane's behavior. “[Her] explanation of opportunity cost does not illuminate her character or advance the plot. Why is it there? Austen was famously precise, and I would not call any of her choices ‘trivial.’” Chwe's argument about Austen's intentions relied wholly on an assumption about her “famous” economy of craft. Deresiewicz's later counterattack relied on the same assumption, arguing only with Chwe's interpretation of the dialogue's utility. “Chwe would have us believe that Jane

Austen, a writer who never wasted a word, would stop [*Emma*] in its tracks in order to insert [an] utterly banal idea. . . . Mrs. Weston's explanation does indeed advance the plot."²² Such assumptions about aesthetic economy, ubiquitous in Austen studies, have perhaps deterred that economy's theorization because they have entailed a negligence—sometimes even an active undermining—of what is crucial to understanding it: the indisputable presence of excess. Isobel Grundy, for instance, claims that “although almost nothing Miss Bates says is to the point, not a scrap of it is wasted.”²³ Similarly, Colin Winborn makes the unexplained assertion that “atten[tion] to detail . . . is the very basis for the extraordinary tact and economy of [Austen's] writing.”²⁴

Despite seemingly universal acknowledgement, Austen's economy remains somewhat more presumed than theorized. The following analysis of Austen's formal economy—brevity, succinctness, efficiency—will include and justify the consideration of her surplus—diffusion, wordiness, redundancy. And it will show how *Emma*'s linguistic “economics”—that is, its management and allocation of relative concision and verbosity—iterates and reinforces aspects of the free-market economics whose moral philosophy is advanced, as we have seen, by the multimarriage plot.

The novel's marital waste aversion—the conservation of procreative value; the avoidance of excessive dissatisfaction—is matched and enhanced by several kinds of formal economy. Most simply, the social arrangement in which no one is left unmarried is part of an overarching character configuration in which all figures (but one) are paired. The novel's characters, in addition to the eight who become married, comprise two sets of spouses (the Westons and the John Knightleys) and a widow-widower pair (Mr. Woodhouse and Mrs. Bates). The pattern even continues offstage: Mr. Martin has two sisters. The four engagements thus constitute not only a social but also an aesthetic phenomenon, propagating a universal rule of balancing twos.

Yet there is a glaring exception to this rule: the old maid Miss Bates—the single instance of surplus in the novel's otherwise totalizing social and formal pairing system. When Mr. Knightley critiques Emma's memorable insult of Miss Bates at Box Hill by citing the pain of Miss Bates's “situation,” we understand him to mean, at least partially, her singlehood. Meanwhile, the insult itself has humiliated Miss Bates on the basis of another kind of surplus. Following the proposal that everyone on the excursion offer “one thing very clever . . . or two things moderately clever—or three things very dull indeed,” Emma mocks Miss Bates's typical garrulity: “Pardon me—but you will be limited as to number—only three at once” (347). With the help of Mr. Knightley's subsequent reminder that she is a spinster, the episode allies Miss Bates's verbal excess with her position as social excess. Indeed,

her verbiage gives her social superfluity a linguistic embodiment, existing not only within the diegetic world but also in the fabric of narrative discourse that relentlessly quotes it.

The long transcriptions of Miss Bates's superfluous, aimless speeches defy the allegiance to economy so salient in the novel's character configuration and so frequently alleged by the narration and characters. We may well wonder why Austen allows a flagrant appendage to mar the perfect arrangement of characters into pairs, and likewise, why her most memorably voluble character appears in the novel whose structure and statements most emphatically revere economy.²⁵ And these questions might provoke others. *Emma* has a four-letter title but it is the longest of Austen's novels, and many, since its first publication, have complained of it being the slowest.²⁶ In a text that ostensibly celebrates economy in principle and structure, why are the breaches of economy so ostentatious?

Of course, no discourse is absolutely economical or wasteful; such ascriptions are always contingent. More than three dull things would be excessive relative to three dull things; the novel is long and slow relative to the length and pace of Austen's other novels. "Concision" relies on the possibility of specific insignificant or redundant words, and economy means safety from a specter—it occurs when something is "not thrown away."

Miss Bates embodies such a specter of waste for the novel, helping dramatically to define the linguistic and sociological economy of the novel's broader stamp. Her diffuse verbal register, for example, drapes over all other language a perceived cloak of relative economy, desensitizing us to Mr. Woodhouse's monologues on Hartfield pork and the "thousands and tens of thousands" in Frank's effusive final letter. In parallel, when we call the marriage game outcome a Nash equilibrium, we do so on the basis of a conjugal imperative that asserts its hegemony by discrediting the unmarried Miss Bates.

And just as her social marginalization makes the *marriage* component of "marriage outcome" seem more desirable, her speeches enhance the appeal of its *outcome* component. Always threatening never to conclude, they activate the longing for conclusion itself. Her status and speech thus render the final maximizations valuable as an *end* in two and therefore mutually enhanced senses. As the Box Hill episode emphasizes, social and formal excess work hand in hand, the aversion to each projecting itself onto the other. Ultimately, Miss Bates enhances the desirability of waste aversion as a general principle, marriage(s), and (the) ending, all the while underscoring their equivalence. In doing so, she inevitably helps heighten the appeal of the free-market moral philosophy that leads to them.

Her verbal register, provoking impatience, also animates those character traits that are ideal for the success of a free market. In its aim toward

ceaseless growth, capitalism requires a discontent that exceeds the enjoyment of wealth, since contentment with existing wealth would produce no motivation to grow it. Such motivation, crucial to capitalism's proper functioning, was believed by political economists like J. R. McCulloch to be rooted within human nature. He would argue in *Principles of Political Economy*, just a decade after the publication of *Emma*: "Whether the attainment of wealth . . . be favourable or unfavourable to happiness, there can be no doubt of its pursuit being eminently congenial to human nature. . . . 'The natural flights of the human mind are not from pleasure to pleasure, but from hope to hope.'"²⁷ Catherine Gallagher argues that McCulloch, with this conception, "lit on the perfect affective predisposition for the Victorian novel reader. . . . By . . . insisting that we are usually more gratified by anticipation than achievement, McCulloch asserted that we do not work just to reach the goal of consumption. Nor, by extension, is the gratification of reading experienced only at the end of the narrative."²⁸ The pleasure of the novel form depends on the dominance of anticipation over achievement. This is partly why the model's version of the story is unsatisfactory for the novel's reader, and why we usually avoid bypassing narrative middles to jump to their endings—or in the case of *Emma*, why we presumably do not bypass Miss Bates's speeches. To D. A. Miller's observation that the *structure* of "traditional narrative is a quest after that which will end questing," we may add that the *act of reading* traditional narrative is a quest after questing.²⁹

Miss Bates's verbal excessiveness renders economy, the ending, and the economy of the ending—along with the self-interested process of getting there—more desirable. As a result, she not only helps stimulate the affect that is essential to capitalism but also perpetually satisfies the desire, belonging to readers and economic actors alike, *for* the affect. To quote Gallagher's study of McCulloch once more, "Products that represent the desire for enjoyment become merely the means of stimulating the desire, which is the primary desideratum. . . . Wants, not enjoyments, are the telos of this system."³⁰ Perhaps the most curious word here is "become," as it seems to gesture toward a process of transfiguration: an unsatisfied desire (for a product) is transfigured into a satisfied desire (for desire).

A novel performs such a transfiguration of desires by transfiguring the "product" itself. The closure, along with the skeletal plot that closure completes, is the ostensibly desired product, or object. But it is transformed through a distension that acts as the stimulant of desire, and therefore the object of ultimate desire. *Emma* dramatically underscores this procedure: an extremely economical plot (capable of being reduced to a quantitative model) is converted into an extremely long and slow narrative (a novel).

Miss Bates draws attention to this dynamic by being, not just in this novel but in the history of the novel, one of the most effective signifiers of

diffusion as being a transformation of both product and desire. Her spinsterhood itself embodies this sort of procedure: in the case of any old maid, a single woman's extended anticipation of an outcome—marriage—is in fact a transfiguration of the (true) outcome—singlehood—into delay and distension. Differently put, the spinster's singlehood appears to be a preparation for or delay to marriage until it turns out to be—to have been all along—a transfiguration of marriage. Such an operation, thus essential in Miss Bates's marital status, is instantiated in her verbal performances, not only, as we have seen, in their sum, but even in their individual occurrences.

Indeed, it appears in the novel's very introduction of Miss Bates, which extends the length of a full chapter composed of her rambling about a letter from Jane that she prepares, she thinks, to read aloud. Emma, her targeted listener, runs away before she (or we) can hear the letter, but by that time, Miss Bates has rambled about it so extensively "that though much had been forced on [Emma] against her will, though she had in fact heard the whole substance of Jane Fairfax's letter, she had been able to escape the letter itself" (152). Emma escapes the letter, but its contents do not escape her: Miss Bates's chatter replaces the thing it pretends to preface. Likewise, in ideal capitalism, the pleasure of accumulating wealth replaces the enjoyment of wealth that the accumulation of it pretends to preface.

Miss Bates stands in the way of Jane's narrative, an object of interest to many readers if not to Emma. But tellingly, at the very moment that Emma's (and *Emma's*) ultimate interest is satisfied, we find still another instance of economical ends transfigured into uneconomical means in a frustration and perpetuation of readerly desire. As we know, the anticipation and desirability of Emma's reply to Mr. Knightley's proposal is fundamental to the meaning of the novel: "She spoke then, on being so entreated.—What did she say?—Just what she ought, of course. A lady always does" (404). Narrative language exceeds narrative matter, as the answer to a yes-or-no question uneconomically swells into multiple sentences of no explicit answer at all. In a reprise of Miss Bates with Jane's letter, what seems to precede an outcome ("What did she say?") or descriptively preface that outcome ("Just what she ought, of course") turns out to be a transfiguration of that outcome. Indeed, the completion of the novel's central engagement—an expanded incarnation of that which could be compressed into a single word—is paradigmatic of the novel, capable of being compressed into a single model.³¹

Thus, free-market capitalism and the generic lengthiness of novels are allies, both depending on the human desire to desire. And through this alliance, as Miss Bates's extreme relative position and representation make clear, *Emma's* manipulation of economy and excess enhances the appeal

(within the *novel*, by rendering the outcome desirable) of capitalism's preferred moral philosophy such that the novel can act, simultaneously, as an agent in the perpetuation of capitalism's preferred affective state (within the *reader*).

The relative values of linguistic expenditure are additionally reasserted by their distribution across the diegetic boundary separating the characters from the narrator, and Austen's allocative division between these planes reveals yet another facet of the free-market preferences structuring the fictional world. The boundary makes the novel an analogue for an economy featuring the ideal extent of government involvement in laissez-faire economics: the third-person narrator is present and watching, but neutral, nonintervening, and self-effacing.³² And though it might be supposed that the narrator's presence would weaken the sense of a self-regulating diegetic world, this presence offers certain rhetorical advantages. Meanwhile, its only potential disadvantage—its perceived intrusion—is contravened by Austen's distribution of relative verbal economy and excess.

The narrator's ability to represent subjectivity reliably enables certainty regarding the psychological motives that provoke the outcome. As we have seen, it discloses the persistence of Emma's self-interestedness by offering, for example, the inflected shape of what does *not* enter her brain in a way that her conscious soliloquy alone would not allow. In addition, as Peter Bowen and Casey Finch have argued, an ironic secondary perspective, belonging not to the impersonal narrator but to a sort of ventriloquist, permeates the free indirect discourse of *Emma* and represents the collective social perspective of Highbury.³³ The novel's free indirect discourse might thus be said to offer a blend of personal and communal perspectives ideal for conveying the free-market theorist's double concern for individual and aggregate utility. Thus, it is no wonder that following the event that leads to the oneness of individual and aggregate marital satisfaction—Emma's preference discovery (the assignment of a "3" to Mr. Knightley)—her perspective becomes one with the secondary perspective. Prior to this event, her self-interestedness is focalized with an ironic judgment in opposition to her own. But once her self-interestedness equates to the interest of the group, it is unironically legitimized from without her brain as much as from within, just as a classical political economist would have it.

Sheer presence, a potential detractor from our sense of the characters' self-regulation, is perhaps the only disadvantage of a narrator who is otherwise helpful to the translation of laissez-faire moral philosophy into novelistic art. But Austen's distribution of relative verbal economy and excess across the planes of narrator and character counteracts it. A consistent pattern to this distribution appears throughout her writing career, personal

and literary, in which the dichotomy between economy and excess is aligned perfectly along parallel dichotomies between herself and others (in her personal letters) and between narrator and character (in her fiction).

We see this tendency in letters to her sister Cassandra.

I am inclined for short sentences. Mary will be obliged to you to take notice how often Elizabeth nurses her Baby in the course of the 24 hours, how often it is fed & with what; you need not trouble yourself to *write* the result of your observations, your return will be early enough for the communication of them.³⁴

In the short sentence alleging inclination for short sentences, form affirms content. Yet its sincerity is immediately undercut by the following one, fifty-two words spread over multiple clauses. It acts, like Miss Bates, as a materialized specter of relative excess—a measure by which the former sentence can be assessed. But it is also, in this regard, excessively excessive, featuring the dual noneconomy of both lengthiness and repetition (“how often . . . how often”). Dramatized by the terse prior sentence, the surfeit suggests a satiric miming of the very tedious and repetitive feedings of Elizabeth’s baby that it describes. It operates like free indirect discourse, emerging from and as if partially authored by its “characters.” And this ironic parroting allows Austen to indulge her obvious attraction to verbal excess even as she disavows and denounces it. Ventriloquism excuses verbosity.³⁵

A parallel rule appears in the composition of *Emma*, which breaks with concision continually but only under the alibi of representing the speech or consciousness of characters. Breaches of brevity are never referable to the narrator, which in its “pure” form, whenever it is untainted by the characters who stretch it, projects a shape infallibly on the side of relative economy. The narrator thus literally occupies less space than the characters, intensifying our sense, encouraged also by the narrator’s impersonality, that the characters act independently of a governing force. In a translation of Adam Smith’s most enduring image into novelistic art, Austen’s is the authorial hand that renders itself near invisible.

Illustrating the principles of concision and brevity thus requires producing instances of verbosity, delay, and prolongation, yet these very violations of the standard of maximum utility also call to mind aspects of *laissez-faire* discourse that are in tension with the drive toward efficiency. They remind us of a consumer economy’s need to keep desire alive by preferring the pursuit of pleasures to their attainment, thus converting dilatory means into ends in themselves. Similarly, they resemble the liberal state’s interest in privileging the messy processes by which individuals follow their errant desires rather than imposing from without some more direct route to “equalization.”

Part 4: Temporal Economy

The game-theory model delineated the results of the novel's plot such that we could consider their role in the relation of political economy to the novel's story and language. This section will consider the manner of that delineation, probing the relation between the form of the model and the form of the novel to which it refers. And it will focus specifically on temporality and its effect on the plausibility of the novel's moral philosophical discourse.

As we have seen, the model—the ideal utility maximizing Pareto optimal Nash equilibrium—reveals the novel's penchant for the waste-averse elements of political economy: no one is thrown away and there is no unnecessary surplus dissatisfaction (no preference toward which an available means of satisfaction goes undirected). The depiction of this perfect marital arrangement, moreover, relies on certain other formal symmetries: for example, a delimited and even number of available men and women willing to be paired. Of course, the model does not attempt to represent the process by which its outcome is reached. Whereas the novel's plot is spread over time and organized into complexly interrelated stages, the model's box of clean, static lines and numbers, presented nonsequentially and all at once, eliminates temporality altogether. The model might thus be said to act as a counterweight to the genre's definitive requirement of lengthiness, representing the pole of the novel's temporal economy that stresses extreme concision.

All novels must, of course, represent temporal extension—as Paul Ricoeur pointed out decades ago, the passage of time is the underlying referent of all narrative discourses. But it is possible to engineer a perceived *relative* economy of time by slowing and speeding narration. And as in the model, so in the novel: temporal efficiency aligns with the economical marriage outcome. The scene of Emma's revelation is emblematic.

“Have you any idea of Mr. Knightley's returning your affection?”

“Yes,” replied Harriet modestly, but not fearfully—“I must say that I have.”

Emma's eyes were instantly withdrawn; and she sat silently meditating, in a fixed attitude, for a few minutes. A few minutes were sufficient for making her acquainted with her own heart. A mind like her's, once opening to suspicion, made rapid progress. She touched—she admitted—she acknowledged the whole truth. Why was it so much worse that Harriet should be in love with Mr. Knightley, than with Frank Churchill? Why was the evil so dreadfully increased by Harriet's having some hope of a return? It darted through her, with the speed of an arrow, that Mr. Knightley must marry no one but herself!

Her own conduct, as well as her own heart, was before her in the same few minutes. (382)

The temporal efficiency of Emma's discovery is noticeably foregrounded: an immediate appearance of “instantly,” the prioritized mention of “rapid

progress” before even the substance of the discovery, the un-Austenian use of a generic metaphor focused specifically on quickness (“the speed of an arrow”), and above all, the triple appearance of a “few minutes.”

In rendering the outcome inevitable at last, Emma’s discovery is effectively equivalent to the outcome; providing the final number awaited by the model, it is marital waste aversion’s central achievement.³⁶ And with the narrative’s shift, at this climactic moment, into the register of *kairos*—the Greek word for the right or opportune moment, which will never return and must be seized immediately—the moment propagates and allies multiple kinds of economy, similar to what Miss Bates does for the principle of excess. Just as she, at one pole, is the social waste that wastes words and time in her world and ours, so is Emma, in conjunction with the narrator, now the consolidator of social, temporal, and verbal economy.³⁷

And just as the narrative itself partakes in the excess of Miss Bates, transcribing her long speeches, it also borrows Emma’s efficiency. As the most crucial moment of the novel, the *narrating* at least of Emma’s revelation might have been unhurried, exposing every gradation from ignorance to awareness. But Emma’s revelation takes “a few minutes” that are not needed to read about it: her speed is surpassed by that of the language that conveys it. In one way, this brings the fictional Emma closer to our world. As we know, economy is relative: nothing can be fast, only faster. Here, discourse-time’s brevity relative to story-time *realizes* a sense of speed, replicating Emma’s feeling within the reader.

The move is characteristic of the narrator’s voice. Even when characters behave quickly (“Mr. Knightley and Emma settled it in a few brief sentences” [122]), the narrator is quicker (expressing their few sentences in one sentence). *Emma*’s narrator thus habitually speaks a language that not only *is economical* relative to that of the characters, as we saw in part 3, but also *economizes*, compressing story-duration to fit a relatively smaller segment of discourse-duration. And though this practice emphasizes the value of efficiency and thereby the value of the outcome, it also threatens to undermine our sense of the story-world’s referentiality by implicating the presence of an economist, or economizer—clearly an artist, and therefore an artificer—who mediates the lived experience of characters and thus distances it from our reality. Economizing, in other words, highlights the interference at work in the translation from story to discourse, and narrative brevity thus not only brings the novel closer to the pared away, time-expunging shape of the perfect model; it also associates both with the removal from reality.

Yet though the narrator continually economizes, characters continually do the relative opposite, and even when characters are quick, they are less so than the narrator. Discourse that emerges from the mouths and minds of characters (including free indirect discourse) thus perpetually pulls the

novel away from the form of the model and the antireality underscored by that form. Put differently, character experience not only provides the measure, as we saw in our discussion of Miss Bates, by which the narrator can be deemed relatively economical and therefore a mouthpiece for the value of economy; it also counterbalances and helps neutralize the artificiality of the narrator's very existence.

The association between character discourse, long-windedness, and plausibility is noted, ironically, by Emma when commenting on Mr. Martin's letter proposing marriage to Harriet early in the novel. Harriet asks, "Is it a good letter? Or is it too short?" Emma's response: "Yes, indeed, a very good letter . . . so good a letter, Harriet, that . . . I think one of his sisters must have helped him. . . . And yet it is not the style of a woman; no, certainly, it is too strong and concise; not diffuse enough for a woman" (50). Of course, Emma's refusal to acknowledge Mr. Martin's virtues, either as a fitting suitor for Harriet's hand or as an unassisted writer of effectual letters, is one of the first errant steps away from the swift accomplishment of the optimal arrangements represented in the model, a fact that only compounds the irony: efficiency is valued and therefore it is implausible—unrealistic—for it to belong to Mr. Martin.³⁸ The exchange certainly does not question the value of "strong and concise" writing; instead, even as Emma admires Mr. Martin's brevity, she deems it simply *too good to be true*.³⁹

The last point might be said to illuminate the relation between character experience and realism in the traditional novel more generally. It is understood that character thought and speech bolster realism by cultivating the sense of resemblance between fictional and real people. But *Emma* underscores how rendered character experience also builds the equation between temporal elongation and realism by counterbalancing the efficiency inherent to the momentum and extraction of pure plot. The model is an extreme form of such extraction, but some version of it is involved in any comprehension of plot: we must select and connect only certain relatively significant dots while bypassing others—and with them, their duration. *Emma* draws attention to this procedure by performing relative brevity and diffusion to such exaggerated degrees and along such stark oppositions between narrator and character, implausible and plausible. Any realistic novel must, like *Emma*, negotiate between the exigencies of limits on one side (a finite number of words to allocate; the obligation to condense time or depict a scarce quantity of time and then to conclude) and limitlessness on the other side (the story's fundamental existence in a stable, unmodifiable timeline that offers the impression of moving past the work's closure). Novels in general must define an equilibrium, in other words, between the compression and dilation of time, relative discursive efficiency and excess. But *Emma*, additionally and dramatically, accords the former greater value

while indicating that the latter is far more *likely*, thereby aligning lengthiness with reality.

Emma thus presents an economic(al) model of what is a normal novelistic tension. Its advancement of a free-market moral philosophy depends on and is strengthened by homologous and analogous economies in which waste aversion is propagated as a social and aesthetic value, underwritten by the intersection of many other kinds of efficiency. Insofar as the artifice suggested by such aversion threatens both other tenets of political economy and the felt plausibility of the discourse itself, the threat is contravened by those features of the novel's form that resist the model's form: distensions and excesses that are as relatively amplified as the constrictions they counterbalance.⁴⁰

In *The One vs. the Many*, Alex Woloch contends that Austen's "great imaginative achievement" is "to represent the disequilibrium of the new, dynamic competition [of capitalism] which is emerging in her period through her depiction of a sphere of life [marriage] that was typically understood as sheltered from these economic structures."⁴¹ Woloch aptly identifies a homology, rooted in competition, between capitalism and the marriage sphere, but the shared principle he discovers is not a common moral philosophy leading to social equilibrium; rather, it is an inequitable distribution of wealth that he calls disequilibrium. To establish this point, he gestures toward the occasional competition among numerous women in need of disproportionately scarce wealthy men and overlooks the broader competition among men and women alike, both rich and poor, for spouses whose desirability may or may not lie in their wealth. Yet the latter type of competition appears throughout Austen's oeuvre, is omnipresent in *Emma*, and does lead to a kind of equilibrium—an equilibrium that, as we have seen, is not strictly a matter of wealth, but that accounts for satisfaction more fundamentally. The economies and economics of *Emma* show Austen not simply reasserting capitalism's indisputable effects on the distribution of wealth but unequivocally embracing its philosophical assumptions.

Several components of *Emma* suggest that this picture is representative of Austen's moral-economic position in general. Two in particular support this association because they are shared with the other novels but here feature in their most accentuated form. First, *Emma* offers Austen's most explicit and forceful illustration of a primary assumption of capitalist moral philosophy—the immanence and ubiquity of self-interested competitiveness. Second, *Emma*'s protagonist and marriage plot epitomize Austen's most consistent and indisputable moral-economic view, that wealth (and, by extension, its equitable distribution) has no bearing on what she deems more valuable, happiness and good sense. Emma, the richest of her

community and of all Austen's heroines, enjoys a financial freedom—emphasized in the novel's very first sentence—to which her ironization and subjection to the conjugal imperative are nonetheless indifferent. She is the quintessence of the wealthy yet ironized characters who feature in every Austen novel and who demonstrate the moral inconsequence of wealth.

Unlike these two components, the third is a singularity that distinguishes *Emma* profoundly from the other novels, and it dwells in the novel's representation of marriage. Austen's other marriage plots correspond to that of *Pride and Prejudice*, which, as Woloch observes, "centers on marriage not as a social process but as the fulfillment of individual desire."⁴² In *Emma*'s (multi-)marriage plot, by contrast, the reverse is true. As we have seen, desire plays no articulated role in Emma's revelation that "Mr. Knightley must marry no one but herself." Her marriage, like the others within the novel, relies for its actualization on a context of intricate social interdependence.⁴³ Since procedure and outcome *in the aggregate* are thus of real consequence, the narrative arguably forms Austen's most meaningful statement about social organization as a whole and the collective value of competition.⁴⁴

This value rests with competition's perceived orientation toward equilibrium, and it is precisely with standards of equilibrium—balance, symmetry, control, harmony—that criticism and general readership from across the ideological and methodological spectrum associate Austen's style.⁴⁵ The concordance is no accident: Austen's aesthetic values are suffused with an affinity for capitalist values.⁴⁶ *Emma* renders this suffusion especially apparent by exaggerating tendencies present in all of Austen's novels—inefficient characters who slow and lengthen narrative discourse; pairings between syntagms or characters; an alleged aversion to "throwing away" people, words, and time—and integrating them with the dynamics of free-market moral philosophy. It does the same with features that permeate the novelistic form more generally, including the equation between realism and temporal elongation, and the distended satisfaction of the readerly desire for desire. *Emma*'s balances between efficiencies and inefficiencies, iterating and enabling a Nash equilibrium at once perfect and plausible, dramatize the alliance between economic behavior and novelistic discourse in Austen and beyond.

Notes

1. Jane Austen, *Emma*, ed. Fiona J. Stafford (London, 2003), 50, 74.
2. Frances Ferguson, "Jane Austen, *Emma*, and the Impact of Form," *MLQ: Modern Language Quarterly* 61, no. 1 (2000): 177. Wayne Booth and A. Walton Litz are paraphrased by Ferguson in this essay.
3. Michael Suk-Young Chwe, *Jane Austen, Game Theorist* (Princeton, 2013).

4. Mary Ann Dimand, *A History of Game Theory*, ed. Robert W. Dimand (London, 1996), 2.
5. D. Gale, "College Admissions and the Stability of Marriage," *American Mathematical Monthly* 120, no. 5 (2013).
6. The algorithm involves n number of iterations in which each unengaged man "proposes" to the most-preferred woman to whom he has not yet proposed. Each woman then considers all her suitors and tells the one she most prefers "maybe" and all the rest of them "no." She is then provisionally "engaged." In each subsequent round, each unengaged man proposes to one woman to whom he has not yet proposed (the woman may or may not already be engaged), and the woman once again replies with one "maybe" and rejects the rest. This may mean that already engaged women can "trade up" and already engaged men can be "jilted."
7. That critics have not extensively considered the mathematical-ness of the novel could be attributable to a potential perception that focusing on the novel's architectural systematicity as such is a reduction and even denigration of the novel form's general complexity and nuance. Blakey Vermeule, *Why Do We Care About Literary Characters?* (Baltimore, 2010), writes, "At the risk of sounding too mechanical, [*Emma*] is a sophisticated hydraulic system for producing a guided distribution of resources" (185, emphasis added). Part 4 of this essay demonstrates that the mathematical analysis of narrative can lead to a more thorough understanding precisely of some of the novel form's complexities.
8. Franco Moretti, *Distant Reading* (London, 2013), 218.
9. Perhaps nothing speaks to the unqualified desirability of some marriage over no marriage than the union between Mr. and Mrs. Elton, which appears less than happy but nonetheless compels even those who do not like Mrs. Elton to exalt her for her status as a new bride.
10. Jeremy Bentham, *Bentham's Political Thought*, ed. Bhikhu C. Parekh (London, 1973), 67.
11. *Ibid.*, 68.
12. Jeremy Bentham, *A Fragment on Government* [1776], in *A Comment on the Commentaries and A Fragment on Government*, ed. J. H. Burns and H. L. A. Hart (London, 1977), 393.
13. Of course, these assumptions of most traditional economic models have been complicated in recent decades by the development of behavioral economics, its studies showing that most decisions are not made on exclusively rational grounds and that they frequently contravene true objectives and preferences.
14. Eve Kosofsky Sedgwick, "Jane Austen and the Masturbating Girl," *Critical Inquiry* 17, no. 4 (1991): 833. Sedgwick is of course one of the most famous critics to have "interrupt[ed] this seemingly interminable scene of punitive/pedagogical reading" (834); she goes on specifically to target Tony Tanner in this context, but we could add many others to the list.
15. See, for example, Cecil E. Bohanon and Michelle Albert Vachris, *Pride and Profit: The Intersection of Jane Austen and Adam Smith* (Lanham, MD, 2015); Shannon Chamberlain, "John Willoughby, Luxury Good: Sense and Sensibility's Economic Curriculum," *Persuasions: The Jane Austen Journal* 34 (2012); Eleanor Courtemanche, *The 'Invisible Hand' and British Fiction, 1818–1860: Adam Smith, Political Economy, and the Genre of Realism* (Houndmills, Basingstoke, Hampshire, 2011); Rae Greiner, *Sympathetic Realism in Nineteenth-Century British Fiction* (Baltimore, 2012); Peter Knox-Shaw, *Jane Austen and the Enlightenment* (Cambridge, 2004); Kenneth Moler, "The Bennet Girls and Adam Smith on Vanity

- and *Pride*,” *Philological Quarterly* 46, no. 4 (1967); Elsie B. Michie, “Austen’s Powers: Engaging with Adam Smith in Debates About Wealth and Virtue,” *NOVEL: A Forum on Fiction* 34, no. 1 (2000).
16. Michie, “Austen’s Powers,” 21.
 17. Courtemanche’s analysis of *Northanger Abbey* leads to a conclusion that is similar to Michie’s about the relation between Austen and *The Theory of Moral Sentiments*, even though it also analyzes the formal relationship between realist novels and political economic works like *The Wealth of Nations*. She argues that “romantic love and altruism transform individual self-interest. Since . . . heroines are empowered by affection . . . to know more than they think they do, they present a kind of solution to the ‘Adam Smith Problem,’ supplementing the social perspectivalism of Smith’s *Wealth of Nations* with the focus on personal sympathy analysed in *The Theory of Moral Sentiments*.” Courtemanche, *The ‘Invisible Hand’ and British Fiction*, 80.
 18. In his reading of the proposal scene, Knox-Shaw, *Jane Austen and the Enlightenment*, does not bring up the self-interest of *The Wealth of Nations*, but he makes a related connection to volume 6 of *Theory of Moral Sentiments*: Emma, he writes, “passes beyond ‘heroism of sentiment’ to . . . self-love, in particular of that unfashionable Stoic duty revived by the Scottish school, the care of self” (218). He sees this, though, as a “boundary-mark” (218)—the limit point of what he reads as her plot trajectory of otherwise “progressively break[ing] through the cocoon of egotism that keeps her apart from Highbury” (217). It is this reading that leads him to calling her reaction to Mr. Knightley’s proposal “a paradox” (218). I am arguing, by contrast, that it is consistent with her fundamental self-interestedness throughout the novel.
 19. Among works on literature and political economy, several of which will be important to part 3, is Mary Poovey, *Genres of the Credit Economy: Mediating Value in Eighteenth- and Nineteenth-Century Britain* (Chicago, 2008), which explains how economic theory in the eighteenth and nineteenth centuries came to define rationality as self-interestedness in the context of differentiating its own form of writing from that of imaginative writing. Meanwhile, A. O. Hirschman, *The Passions and the Interests* (Princeton, 2013), traces the history of how, over the course of the seventeenth and eighteenth centuries, self-interest came to replace the passions as drivers of economic activity. Austen’s imaginative writing, I am observing, defines rationality in the manner of the political economists and conceives of it as a driver of social activity more broadly construed.
 20. Adam Smith, *The Theory of Moral Sentiments* (Oxford, 1975), 185.
 21. William Grampp, “What Did Smith Mean by the Invisible Hand?” *Journal of Political Economy* 108, no. 3 (2000), in a thorough explication of the term “invisible hand,” deplores the way it has been used since the mid-twentieth century, when there was an upsurge of interest in it. As he points out, it is used once in the entire book and refers solely to “the inducement a merchant has to keep his capital at home, thereby increasing the domestic capital stock and enhancing military power” (441). It is misguided, he argues, to take the hand out of context and to use it to refer to competition and price mechanisms in general—as a justification for all free markets. I only follow the convention of those who do so as a shorthand for representing the moral philosophy at large. Here is the full quotation, justifying Grampp’s point, in Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Edwin Cannan (Chicago, 1976): “By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its

- produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention" (423).
22. Michael Suk-Young Chwe and William Deresiewicz, "Can You Apply Game Theory to Jane Austen?," *New Republic*, 27 January 2014, <https://newrepublic.com/article/116346/debate-can-you-apply-game-theory-jane-austen>.
 23. Isobel Grundy, "Why Do They Talk So Much? How Can We Stand It?: John Thorpe and Miss Bates," in Bruce Stovel and Lynn Weinlos Gregg, eds., *The Talk in Jane Austen* (Edmonton, 2002), 45.
 24. Colin Winborn, *The Literary Economy of Jane Austen and George Crabbe* (Aldershot, UK, 2004), 5.
 25. The self-conscious positioning of Miss Bates as excess relative to the eight paired characters is articulated metaphorically through at least one character: "Mr. Woodhouse considered eight persons at dinner together as the utmost that his nerves could bear—and here would be a ninth" (271).
 26. John Henry Newman, for example, complained in a letter to Mrs. John Mozlet, dated 10 January 1837, reproduced in *Jane Austen: The Critical Heritage*, vol. 1, 1811–70, ed. B. C. Southam (London, 1968), "The action is frittered away in over-little things" (117).
 27. J. R. McCulloch, *The Principles of Political Economy* (London, 1970), 532–33.
 28. Catherine Gallagher, *The Body Economic: Life, Death, and Sensation in Political Economy and the Victorian Novel* (Princeton, 2009), 71.
 29. D. A. Miller, *Narrative and Its Discontents: Problems of Closure in the Traditional Novel* (Princeton, 1981), 4.
 30. Gallagher, *The Body Economic*, 56.
 31. Austen criticism tends to read the proposal scenes above all as "elisions" and therefore as denials of readerly satisfaction. But by focusing on this elision's distension, we see that what may be seen as a denial is also a provision—specifically, of readerly desire. After all, since the reader knows the substance of Emma's answer, it is not really withheld, only packaged in a form that actively and extendedly stokes the desire for it.
 32. Courtemanche, *The 'Invisible Hand' and British Fiction*, discusses many resemblances between relative epistemological positions in the novel form (author, character) and in political economy. In her breakdown, she adds to the free individual and restrained sovereign the third category of the knowing theorist. See especially chap. 2, "Omniscient Narrators and the Return of the Gothic in *Northanger Abbey* and *Bleak House*."
 33. Casey Finch and Peter Bowen, "'The Tittle-Tattle of Highbury': Gossip and the Free Indirect Style in *Emma*," *Representations* 31 (1990).
 34. Jane Austen to Cassandra Austen, 20 February 1807, in *Jane Austen's Letters*, ed. Deirdre Le Faye, 3rd ed. (Oxford, 1995), 122.
 35. In another letter to Cassandra, 1 September 1796, in *ibid.*, Austen writes, "I am sorry that you found such a conciseness in the strains of my first letter. I must endeavour to make you amends for it, when we meet, by some elaborate details, which I shall shortly begin composing" (6). The apology acknowledges the sweetness to readerly experience of elaboration or elongation. But Austen again distances herself from excessiveness, distinguishing between her instinctive, preferred writing and the kind that would require extra effort and include "elaborate details"—a phrase itself charged with irony. Breaks from concision are as if so forced or artificial for Austen that they must be composed in advance of the oral conversation she is eventually to have with Cassandra—superimposed, as it

- were, on the original, authentic, concise letter. And yet, M.-L. Massei, “Excess in Jane Austen’s *Juvenilia*,” *Cahiers Victoriens & Edouardiens* 63 (April 2006), notes that Austen’s juvenilia reveal her to have been “deeply delighted both by irrelevance and by exaggeration” and that they partake in an “aesthetic of excess” (42). We might call this “Das Jane Austen Problem”—how do we reconcile the earlier Austen’s affinity for excess with the later Austen’s attachment to economy? The answer of course is that when Austen was interested in excess, she was also interested in economy, since excess and economy operate only relative to one another. There is no contradiction, only variation in the forms taken by her preoccupation.
36. As we have seen, Emma’s discovery consolidates the economy by rendering inevitable Mr. Martin’s marriage because Harriet’s economic circumstances require her to marry someone and she can no longer hope to marry Mr. Knightley.
 37. In many ways, the novel is a narrative about economizing in more than one way: there is not only the movement from a threatened waste of procreative value to its preservation, but also the movement from imbalance to equilibrium in Emma’s character. On the very first page, her problem is defined specifically in terms of surplus: “The real evils indeed of Emma’s situation were the power of having rather *too much* her own way, and a disposition to think a little *too well* of herself; these were the disadvantages which threatened alloy to her many enjoyments” (7, emphasis added).
 38. Still more ironically, Emma’s repetitions of “good letter” and “a woman” display her indulgence in wordiness. Indeed, throughout the novel, even when characters praise economy, their talk features various kinds of unnecessary and obvious lengthening, like redundancy.
 39. This analysis of Emma’s analysis of Mr. Martin’s letter is indebted to a conversation with Catherine Gallagher.
 40. Harriet Martineau’s *Illustrations of Political Economy* (1832–33) perhaps strengthens this argument. That text also (though of course far more directly, explicitly, certainly consciously, and to greater detail) makes a case for free-market capitalism through fictional narrative. But Elaine Freedgood, “Banishing Panic: Harriet Martineau and the Popularization of Political Economy,” *Victorian Studies* 39, no. 1 (1995), notes that “the swiftness with which Martineau’s plots resolve the problems they depict may . . . have contributed to their inability to assuage [Victorian middle class] panic [over the new economics] in the long term” (36). Freedgood suggests this may be due to an extremely short story’s possible inability to heighten anxiety sufficiently to make the resolution in its closure feel satisfying and earned. My argument would suggest that if brevity contributed to the failure of Martineau’s stories to persuade, this may have been because economy of length inherently diminishes plausibility and requires a relative temporal excess (some uneconomical translation, however brief, of story into discourse) to counterbalance it.
 41. Alex Woloch, *The One vs. the Many* (Princeton, 2009), 60.
 42. *Ibid.*, 57.
 43. This is not to suggest that none of the marriages involve desire (Frank Churchill and Jane Fairfax share a mutual attraction that predates their acquaintance with the other bachelor[ette]s). Rather, their actualizations all involve the repudiation of alternatives (Frank and Jane’s marriage occurs in conjunction with his visibly *not* wanting to marry Emma).

44. The argument of David Aers, “Community and Morality: Towards Reading Jane Austen,” in David Aers et al., *Romanticism and Ideology: Studies in English Writing, 1765–1830* (London, 1981), that Austen aligned herself with capitalist values, cites as evidence her seeming idealization of the capitalist Mr. Knightley and what Aers views as her dismissal of the poor through the perspective of Emma. This argument depends on somewhat tenuously identifying Austen with her characters. I am arguing, by contrast, that it is her style and structure themselves that advance capitalist moral philosophy.
45. The most explicit example: Robert K. Wallace, *Jane Austen and Mozart: Classical Equilibrium in Fiction and Music* (Athens, GA, 2009).
46. For Alex Woloch, capitalism appears in Austen’s form just as it does in (his reading of) her depiction of marriage, discussed earlier: through its propagation of disequilibrium. He points to the way her narratives (and novels in general) distribute attention and elaboration inequitably among many characters. I am arguing that it is more abundantly capitalism’s perceived tendency toward equilibrium in satisfaction, rather than disequilibrium in wealth, that instantiates itself in aspects of Austen’s form—from pacing and character organization to diction and plot structure.