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To cite this article: Clark Wolf (2019): “Displacing the Productionist Paradigm: A Comment on Paul Thompson's Spirit of the Soil, 2nd Edition.”, *Ethics, Policy & Environment*, DOI: [10.1080/21550085.2019.1652233](https://doi.org/10.1080/21550085.2019.1652233)

To link to this article: <https://doi.org/10.1080/21550085.2019.1652233>



Published online: 23 Aug 2019.



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“Displacing the Productionist Paradigm: A Comment on Paul Thompson's *Spirit of the Soil*, 2nd Edition.”

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ABSTRACT

Paul Thompson's book *The Spirit of the Soil* first appeared in 1995, and has been re-issued in a new edition in 2017. This comment on the new edition addresses Thompson's argument concerning the *productionist paradigm* in contemporary agriculture. Thompson's work implies that overproduction is the result of passive acceptance of an ethic of production, which has historical, sociological, and religious cultural roots. This article interprets Thompson's discussion of productionism as an argument for the best explanation, and offers an alternative explanation for overproduction in American agriculture. The claim is not that Thompson's argument is wrong, but that it is incomplete. But a proper understanding of the sources of productionism is important, since our understanding of the problem will inform the development of interventions designed to address it.

Paul Thompson's *Spirit of the Soil* was groundbreaking when it appeared in 1995, and has aged remarkably well. The substantially revised new edition is a benefit not only for the field of agriculture and ethics, but also because it provides a new window into the changing ideas of Thompson himself. This is significant because Thompson's work on this topic has shaped the field so decisively that his views are sometimes recited as common knowledge. As a result of this book and its notoriety, Thompson may have suffered the worst-best fate that can befall a philosopher: Language from this book, and aspects of Thompson's framework for thinking about central issues in agriculture, have become so standard in the field of sustainable agriculture that people no longer remember where the terms and ideas came from. I sometimes find students reciting as common knowledge what used to be regarded as philosophically interesting claims first made by Paul Thompson. For example, a paper recently published in the journal *Global Environmental Change*:

The system of agriculture in the Corn Belt can be characterized as fitting within a productivist paradigm or high-yield production regime, which forms the “deep structure” that orients farmer decision making, further contextualized by social, political, economic, and environmental factors at the field, landscape, and human-institutional scale. These structures give rise to path dependency, which Preston defines as the “dependence of future societal decision processes and/or socio-ecological outcomes on those that have

occurred in the past” and whereby the system itself becomes dominant and self-reinforcing. This productivist paradigm is thus “stabilized through various lock-in mechanisms, such as scale economies, sunk investment in machines, infrastructure, and competencies. This lock-in may ultimately lead individuals to make decisions that are sub-optimal at both an individual and collective level.” (Roesch-McNally, Arbuckle, & Tyndall, 2018, p. 207)

This paragraph assumes that productionism is a *paradigm*, that this paradigm acts as an ideology that (partly) explains the behavior of farmers and the landscape of contemporary agriculture, and that this paradigm leads to sub-optimal decision making on the part of farmers. These are all ideas that have a root in Paul Thompson’s work, many or most of them from the original edition of the book we are here to celebrate and discuss. I believe that the concept of ‘productionism’ itself has its origin in the work of Paul Thompson. Paul’s insights, which no one articulated in quite this way prior to the publication of the first edition of *Spirit*, have become so much a part of the common knowledge of researchers in the field of sustainable agriculture that Paul’s work is no longer even cited as a source. Few of us can come to claim this kind of dubious honor of anonymity, but those with whom it is shared are notables: no one cites Leibniz and Newton when we use differential calculus.

I will be critical in my remarks here, but my words in this discussion must be understood in the context of my deep respect for Paul and for his work and for this book in particular: I am committed to this book, I think it’s important and excellent, and I teach parts of it every year and perhaps every semester. I am overjoyed to have a new edition, which I have already taught, and which I look forward to discussing with students and colleagues for many years to come.

Even if he is responsible for the idea of productionism as a paradigm or ideology, Thompson is of course not the first to look at the processes of production and to argue that these forces constitute a paradigm that guides human choice and human action. We find this idea in Marx, and perhaps even in ancient progenitors. Plato distinguishes between the objectives of skilled laborers and the values they create by doing their labor. We also find this idea in the work of the British critic John Ruskin, who spoke in 1859 about the tendency of industrial development to mar the English countryside. Ruskin did not use the term ‘productionist paradigm’ or ‘ideology,’ but he warned against acceptance of a social ideal that would lead to the obliteration of the natural world:

Is this what you want? You are going straight at it at present; and I have only to ask under what limitations I am to conceive or describe your final success? (...) The changes in the state of this country are now so rapid, that (...) I must necessarily ask, how much of it do you seriously intend within the next fifty years to be coal-pit, brickfield, or quarry? For the sake of distinctness of conclusion, I will suppose your success absolute: that from shore to shore the whole of the island is to be set as thick with chimneys as the masts stand in the docks of Liverpool: and there shall be no meadows in it; no trees; no gardens; only a little corn grown upon the housetops, reaped and threshed by steam (...) that no acre of English ground shall be without its shaft and its engine; and therefore, no spot of English ground left, on which it shall be possible to stand, without a definite and calculable chance of being blown off it, at any moment, into small pieces. (Ruskin, 1859/2004, pp. 59-60)

Ruskin believed that the industrial revolution had put England on the path to perdition, and he hoped that we would turn back before his dystopian vision could be realized, and that we might work against this eventuality by understanding and articulating the

end-state that would represent the culmination of existing tendencies and the process underway. We didn't do what Ruskin hoped, at least not in the American Midwest. We are now in the final stage of Ruskin's descent into perdition. While we have few brickyards, coal-pits, and quarries, almost every inch of Iowa is under industrial agricultural production with only fragments and roadside margins left to the 'spontaneous hand of nature.' (Mill, 1872 Book IV Chapter iv) The few remaining spots of virgin land, like the postage-stamp sized Doolittle Prairie just north of the University where I teach, are revered and visited by the faithful, who make pilgrimages to them as to holy shrines. They are not much valued, however, by the general population or the state budget. The fields of corn and soybeans that replaced the prairies are not growing food for human beings. They grow industrial inputs: Iowa field corn cannot be digested by humans. It is destined either to be processed into high fructose corn syrup to sweeten soda pop, or else to be fed to hogs. This is the present face of *productionist agriculture* – a tremendously useful term and concept, that may well have had its origin in the earlier edition of the work we are here to discuss. I have sometimes been tempted to call this the final phase of industrial agricultural development. But as we might discuss later, we are now in the throes of a technological transition that promises to introduce an even more extreme age of unsustainable agricultural intensification.

How did we get here, and what do we think we're doing? Thompson approaches this question by addressing alternative paradigms of thought that might explain our behavior (productionism), and other paradigms which might be proposed as alternatives to those that are now dominant. He reasonably treats paradigms and ethical ideals as arising from conditions of social and technological advance, in a somewhat Hegelian mode. This mode of analysis involves important assumptions, but I will not interrogate them here since I find it a highly plausible and reasonable way to approach the problems he addresses. In this mode, he notes that utilitarian views came to special prominence during the industrial revolution, and that an inappropriate emphasis on rights and deontological constraints may constrain our ability to promote sustainability as an ideal. (189–90)

Productionism as Ideology: An Inference to the Best Explanation?

According to Thompson, American agriculture is in the grip of a productionist paradigm that prescribes an ideal and guides the choices made by farmers. On Thompson's definition, productionism is the view that 'production is a necessary and sufficient criterion for evaluating the ethics of agriculture.' (67) As I read Thompson, both the earlier edition and the present edition of *Spirit* imply that this paradigm provides an explanation for the state of agriculture as we see it. Why should we believe that this might be true? There are two main reasons: first, there is the evidence of contemporary agriculture itself, which appears to be the culmination of Ruskin's dystopian anti-ideal. Second, we have historical evidence that supports Thompson's claim. In Chapter 3 of *Spirit*, Thompson traces the productionist paradigm to a collection of underlying ideological and historical bases. These include the protestant work ethic, which accounts for the tendency to honor 'hard work' and to see productive success as the physical manifestation of the virtues of labor. The Christian doctrine of grace implied to many of its adherents that productivity was an outward sign of God's approval. And the myth

of the garden represents developed, productive land as an environmental ideal. Finally, the new edition cites positivism in the sciences, and naïve economic utilitarianism among the underlying sources of the productionist ethos.

If productionism operates in the way Thompson describes (esp 80–81) then one would expect it to be resistant to change even when incentives are properly aligned. It would not necessarily follow that changing incentives is the wrong kind of policy intervention – people who are in the grip of an ideology or paradigm may still be moved by incentives. But if productionism is a problem, Thompson’s analysis of that problem is emic, or internal, not etic or external: the productionist paradigm, as he describes it, is an ideological commitment that operates in the consciousness of farmers, informing their understanding of what they are doing, and shaping the ideals they use to frame the choices they make even if they are unaware of its effect, and even if they would, as he claims, deny that productionism represents their articulate ideal. Analysis in terms of a paradigm or ideology requires us to distinguish between different levels of emic analysis: the level of articulate understandings that are self-avowed as articulating goals and social interpretations, and the level of understandings that are tacit or implicit, which influence our thoughts and actions even while we are unaware of their influence. The analysis and criticism of ideology requires the adoption of an external or etic perspective, just as the analysis or criticism of social practices requires such a perspective. But the operation of ideology, like the operation of conventional social institutions, takes place within the consciousness and the culture of those who are in its grip.

Confirming the Productionism Hypothesis?

Note that Thompson’s central claim about the productionist paradigm is an empirically testable hypothesis: We can meaningfully ask ‘If Thompson is right to think that the productionist paradigm is responsible for the shape of productionist agriculture as we see it today in Iowa and elsewhere, what should we expect to find?’ Among other things, we would expect to find particular species of sub-optimal, non-economic decision-making on the part of agricultural producers. Here are a few kinds of data that would support Thompson’s hypothesis:

(1) *Agricultural practices that ignore and overlook values that are unrelated to production.*

Note that considerations of environmental protection receive second-place *at best* in the deliberations of farmers and agricultural policymakers. Programs are in place to protect land under the conservation reserve programs [CRP], but these programs have always been under-funded, and have sometimes had no funding at all. Iowa producers who take advantage of these programs typically do so only when the marginal cost from foregone production is counterbalanced by the compensation they receive from CRP payments.

(2) *Surplus production which needs to be shunted off to other purposes.* Iowa farmers produce more corn than the Nation can use. Consequently, there are programs at Iowa State and other major agricultural universities to develop corn-based plastics and corn-based-biofuels. These products are economically viable, when they are, only because subsidies for research and production create artificial demand. Even then, the government purchases excess produce, which is either stored, shipped off as international aid, or sometimes dumped.

(3) *Cultivation of unproductive land.* My colleagues at Iowa State University have recently completed research on the costs and benefits of agricultural production, which takes into account detailed information about the productivity distribution across agricultural land in Iowa. (Brandes

et al., 2016) They have found that up to 20% of Iowa land that is under agricultural production *loses money*. The cost of inputs exceeds the value of the crop produced. In ordinary years, the value of produce grown on the productive areas counterbalances the loss associated with these unproductive regions. But the question remains why farmers would cultivate land that loses money. One possible explanation for this behavior is that Thompson is right.

(4) *Excessive and un-economical use of agricultural inputs*. Perhaps it is sufficient, in this regard, to note how much nitrogen from Iowa fields finds its way into the Mississippi delta?

(5) *Public displays honoring un-economical production maximization*. U.S. farmers regularly compete to see whether they can beat the existing “Max-Per-Acre Corn production” figures. There is no pretense that the winner has pursued production methods that would be appropriate for a profit-making farm: the goal is to push production to the max, and hang the cost. At this point, the maximum per-acre yield has been pushed above 500 bushels.

Perhaps we might regard these as confirming data that support Thompson’s hypothesis that contemporary agriculture is an expression of an unacknowledged paradigm of productionism that leads farmers to make un-economic decisions. These data might be taken to support the view that Midwestern farmers are in the grip of an ideology that explains their behavior.

An Alternative Explanation to Consider

But this would be too quick: there is an alternative explanation for the shape of contemporary agriculture, and it is both simpler and, I will argue, better grounded in the decision-making strategies of actual producers. It seems to me that this alternate explanation accounts equally well for the data. The explanation I have in mind is that Iowa farmers are imperfect profit maximizers who are operating in an environment of limited information, with market-distorting economic incentives that reward what would otherwise be un-economic behavior. Like all of us human decision makers, these farmers have a tendency to discount future costs and benefits at a significant rate. I will not characterize the tendency to discount as a cognitive deficit, because discounting can be framed as a maximizing strategy under standard assumptions. But individuals’ tendency to discount leads to collective outcomes that are economically sub-optimal in terms of intertemporal maximization of wealth or well-being or other economic measures. And discounting by farmers may significantly account for unsustainable and environmentally inappropriate choices that have enormous human and environmental costs over time. Does this alternative hypothesis account for the data?

(1) *Agricultural practices that ignore and overlook values that are unrelated to production*. Economically rational decision makers will ignore or at least discount values that are not represented in their calculation of self-interest. The economic environment in which farmers make their decisions encourages them, for the most part, to ignore environmental quality and environmental values. The fact that CRP reserves increase when crop prices are low (and when CRP provisions are funded!) is evidence that farmers are making economic decisions more regularly than they are making ideologically informed decisions. Analogously, farmers’ tendency to discount *future* costs and benefits may similarly explain why farmers make long-run unsustainable management decisions. Overall, farmers are quicker to respond to incentives than Thompson’s analysis might lead us to expect. (Theisse, 2017)

(2) *Surplus production which needs to be shunted off to other purposes.* Excess production is subsidized: farmers are rewarded for producing more than market demand would otherwise support. Once again, this is an 'etic' economic consideration, not an emic ideological one.

(3) *Cultivation of unproductive land.* Farmers have not been aware which areas in their fields are productive and which are not. The cultivation of unproductive land may as readily be explained by ignorance as by the grip of ideology. If I don't know which regions of my land are economically productive and which are not, it may make sense for me to put every acre under production and hope that, on average, I will make money on the deal. In fact, the explanation why farmers cultivate unproductive land may be a venue where we might make a crucial test between the productivist-paradigm hypothesis and the economic-rationality-plus-ignorance hypothesis: New harvesting equipment, much of it introduced in the last two years, now collects fine-grained data on crop-yields from each region of the field. (It is worth noting that this fine-grained data is, at present, the intellectual property of the large agribusiness companies: farmers will have to purchase from them the information about their own fields!) Until now, farmers have not known which areas were unproductive, but they will now have that information. If they change their behavior in response, this will be evidence that their behavior is more economically rational and less ideologically informed than Thompson implies.

(4) *Excessive and un-economical use of agricultural inputs.* The economic explanation has no trouble with this datum: the un-economic use of inputs may be individually rational, since inputs are cheap, environmental controls minimal, and since the downstream costs of (for example) excessive use of nitrogen fertilizers are not internalized.

(5) *Public displays honoring un-economical production maximization.* In this last category, we may need to give the nod to ideology. But even here, perhaps, we need not look back to the myth of the garden and the doctrine of grace to explain why farmers find it diverting to compete with each other in production competitions, especially when there are prizes and when there are large agribusiness corporations rooting them on. Might we appeal to the agricultural culture of macho to explain this behavior? If so, we might propose a controlled sample experiment that considers the participation of male versus female farmers in these competitions.

It seems to me that much of the behavior that supports Thompson's hypothesis of a productionist ethos is equally or better supported by a hypothesis that farmers are profit-maximizers who discount heavily both over time and with respect to the preservation of 'non-economic' environmental goods, and who suffer from imperfect information. To settle the question between these two alternative hypotheses, one might consider other data that might constitute a critical test between them. I think it would be interesting and valuable to look for such a test.

Why is the debate between these two alternative hypotheses important? It is important because our analysis of the causes of the problem will inform our view about solutions. If the problem is that farmers are in the grip of an historically informed ideological perspective that distorts their decision-making, then the solution maybe to try to influence their ideological commitments. This is hard to do. If the problem is that farmers are incentivized to pursue unsustainable and environmentally inappropriate agricultural practices, then the solution is to devise policies to alter the incentives (and perhaps sanctions) to motivate people to adopt better practices.

The difference between Thompson and myself on this question, however, should not be overstated. It would not follow from Thompson's view that incentive/sanction policy interventions will not be the best way to influence farmers' decision making. Even

ideologically committed people respond to such policy interventions, though they might be expected to respond less promptly than economically rational decision makers. And my suggestion that farmers' decisions are more economically rational than Thompson implies should not be taken as advocacy for a naïve conception of economic rationality. Like Thompson, I would insist that human decision-makers are complex, influenced by a wide range of social and environmental and historical and ideological factors. My claim is not that Thompson is simply *wrong* to think that the shape of agriculture in the US and elsewhere in the developing world indicates that we are in the grip of an ideological productionist paradigm, but that Thompson's discussion of productionism overstates the influence of ideological factors and understates the contribution of economic factors, so that students of Thompson's book are left with the impression that the main explanatory cause of productionist agriculture as we see it today is that we are in the grip of an ideological productionist paradigm. I would argue, by contrast, that economically rational decision-making accounts for most of the problems we see in contemporary productionist agriculture. But here, as elsewhere, we find that the data do not settle the question between competing hypotheses, since one's interpretation of the data will, as usual, depend on underlying commitments which are themselves linked to the hypotheses we hope to test.

An Agrarian Vision of Sustainability and an Unfair Request

I end with a comment about a core thread in Thompson's work: his successive discussions of the concept of sustainability and its use in agriculture and other contexts. Indeed, the last sentence of the new edition expresses what Thompson calls 'The Agrarian Vision of Sustainability,' which is a complex ideal that encompasses many different features:

"A functional society produces a citizenry that is habituated through their quotidian practices to reproduce the biological basis of their survival as well as the institutions that define them as a people." (214)

This conception of sustainability is a rich, plausible, and useful addition to the literature on this important topic. After reading his earlier book *The Agrarian Vision* (well, earlier than the new edition), I was left with many questions about Thompson's conception of sustainability and I found that many of them were answered in the new material and new chapters of *The Spirit of the Soil*. In his discussion, Thompson sometimes uses the norm of sustainability in an a-historical value, criticizing ethical frameworks (rights theory) that may lead us to defend bad unsustainable practices, perhaps marking them as regrettably necessary given the obligation to protect rights. (198–90) My own view— a widely shared view which I do not claim credit — is that 'sustainability' is an ambiguous term, and we cannot rely on any single definition to resolve our problems. So a different conception of sustainability will be relevant to an environmental manager interested to minimize negative environmental impact while allowing appropriate human uses, a forester concerned to manage a plot according to the principle of maximum sustainable yield, a development theorist interested to maintain current levels of development or economic growth, political theorists interested to identify a criterion of fairness between human generations, and an agronomist working to improve agricultural practices by investigating polycropping practices. I note that Thompson's

agrarian sustainability does not fill all these various functions. Indeed, it may be satisfactory in *none* of the contexts I mention here. To evaluate this, or any conception of this plural concept, one must first identify the domain where it is intended to apply. I would like to know more about the domain of application for this conception, and the way this conception might be used to evaluate and improve our agricultural practices.

One might note many things that this book does not do: What I want from Paul Thompson it is unfair to ask of him. I want a full treatment of high industrial agriculture, an analysis of its faults and flaws, and a prescription for improvement that tells me what practical steps I can take to improve our situation, which seems to me to be dire. Perhaps it is a kind of critique to note that *Spirit* does not communicate the sense of urgency about our environmentally inappropriate and unsustainable agricultural practices and institutions, nor does it provide an analysis of the human costs of agricultural labor, the role of immigration and human rights in a philosophical analysis of American agriculture, a feminist critique of gender roles and gendered stereotypes that mar our understanding of our practices. Environmental philosophers who are looking for those things will not find them here. But it is deeply unfair to criticize an extended and thorough philosophical work for the things it does not accomplish. It is even more unfair to expect Paul Thompson to shoulder the burden himself, though he has carried too much of it for much too long. I know Paul will agree when I end by noting that environmental philosophers *still* need to pay more attention to agriculture, and that it is a domain where philosophical analysis can make a very concrete contribution to practice. In this domain, Paul Thompson continues to carry more than his share of the burden, and must be credited with having changed not only environmental philosophy, but the disciplines of agronomy and sustainable agriculture.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Brandes, E., McNunn, G. S., Schulte, L. A., Bonner, I. J., Babcock, B. A., Sharma, B., & Heaton, E. A. (2016). Subfield profitability analysis reveals an economic case for cropland diversification. *Environmental Research Letters*, 11(2016), 014009. Evidence that farmers cultivate unproductive and unprofitable land.
- Mill, John Stuart. 1872. *Principles of Political Economy*. New York: Lee, Shepard, and Dillingham.
- Roesch-McNally, G. E., Arbuckle, J. G., & Tyndall, J. (2018). Barriers to implementing climate-resilient agricultural strategies: The case of crop diversification in the corn belt. *Global Environmental Change*, 48, 206–215. ('Productionism' as common knowledge).
- Ruskin, J. (1859–2004). *The two paths*. (C. Roth, Ed). West Lafayette, Indiana: Parlor Press.
- Theisse, K. (2017). Tight profit margins likely to continue in 2017 [Corn and Soybean Digest]. (Evidence that farmers are closely watching and swiftly respond to incentives and available information about price and production values.). <http://www.cornandsoybeandigest.com/marketing/tight-profit-margins-likely-continue-2017>
- Thompson, P. (1995/2017). *The spirit of the soil: Agriculture and environmental ethics* (1st and 2nd ed.). New York: Routledge.