

CHAPTER 3 — THE ALLEGED LAW OF DIMINISHING RETURNS IN AGRICULTURE

Before proceeding to the subject of cooperation it is necessary to consider, if but to clear the way, what is treated in standard economic works since the time of Adam Smith as the most important law of production, and indeed of political economy as a whole. This is what is called "The Law of Diminishing Production," or more fully and exactly, "The Law of Diminishing Returns in Agriculture." Of it John Stuart Mill says:

This general law of agricultural industry is the most important proposition in political economy. Were the law different nearly all the phenomena of the production and distribution of wealth would be other than they are.

This view of the importance of "the law of diminishing returns in agriculture" pervades the standard political economies, and is held by the most recent scholastic writers, such as Professor Walker of the United States and Professor Marshall of England, as by Mill and his predecessors. It arises from the relation of this alleged law to current apprehensions of the law of rent, and especially from the support which it seems to give the Malthusian doctrine that population tends to outrun subsistence — a support to which the long acceptance of that doctrine is due.

Thus, as the necessary consequence of this "law of diminishing returns in agriculture," John Stuart Mill says:

In all countries which have passed beyond a rather early stage in the progress of agriculture, every increase in the demand for food, occasioned by increased population, will always, unless there is a simultaneous improvement in production, diminish the share which on a fair division would fall to each indi-

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vidual... From this, results the important corollary, that the necessity of restraining population is not, as many persons believe, peculiar to a condition of great inequality of property. A greater number of people cannot, in any given state of civilization, be collectively so well provided for as a smaller. The niggardliness of nature, not the injustice of society, is the cause of the penalty attached to overpopulation. An unjust distribution of wealth does not even aggravate the evil, up but at most causes it to be somewhat earlier felt. It is in vain to say, that all mouths which the increase of mankind calls into existence bring with them hands. The new mouths require as much food as the old ones, and the hands do not produce as much.

As to the law itself, from which such tremendous consequences are constantly deduced — consequences which put us to the mental confusion of denying the justice of the Creator, and assuming that the Originating Spirit is so poor a contriver as to be constantly doing what any mere human host would be ashamed to be guilty of, bringing more guests to his table than could be fed — it is thus stated by Mill:

After a certain and not very advanced stage in the progress of agriculture; as soon, in fact, as mankind have applied to cultivation any energy, and have brought to it any tolerable tools; from that time it is the law of production from the land, that in any given state of agricultural skill and knowledge, by increasing the labor, the produce is not increased in equal degree; doubling labor does not increase the produce; or to express the same thing in other words, every increase of produce is obtained by a more than proportional increase in the application of labor to the land.

This law of diminishing returns in agriculture, it is further explained, applies also to mining, and in short to all the primary or extractive industries, which give the character of wealth to what

was not before wealth, but not to those secondary or subsequent industries which add an additional increase of wealth. Thus since the law of diminishing productiveness in agriculture does not apply to the secondary industries, it is assumed that any increased application of labor (and capital) in manufacturing for instance, would continue to yield a proportionate and more than proportionate return. And as conclusive and axiomatic proof of this law of diminishing productiveness in agriculture, it is said that were it not for this peculiar law, the additional application of labor would result in a proportionately increased production from the same land, and one single farm would suffice to raise all the agricultural produce required to feed the whole population of the world, by mere increase in the application of labor.

This proposition seems to have been generally accepted by professional economists as a valid *reductio ad absurdum*. But analysis will show that this logical structure rests upon an unerring misapprehension; that there is in truth no special law of diminishing productiveness applying to agriculture, or to the extractive occupations. What has been misapprehended as a special law of diminishing returns in agriculture is in reality a general law, applying as well to manufacturing and exchanging, being in fact nothing less general than the spatial law of all material existence and movement — inorganic as well as organic.

This will appear if we consider the relation of space to production. But to do this thoroughly and at the same time to clear the way for considerations which may prove important in other parts of this work, I propose to begin by endeavoring to fix the meaning and nature of space and time