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GARY YOUNG

The Fundamental Contradiction of Capitalist Production

According to a formula canonical in writings in or about the Marxist tradition, the fundamental contradiction in capitalist production is between the social relations of production and the forces of production. The currency of this formula is not without considerable foundation. Marx himself uses it (with inessential variations) in several often-quoted passages, both early and late. In 1859 he employed it in a general account of social change:

At a certain stage of development, the material productive forces of society come into contradiction [*Widerspruch*] with the existing relations of production. . . . From forms of development of the productive forces these relations turn into their fetters.¹

The editors of *Philosophy & Public Affairs*, Gerald A. Cohen, and Andrew Levine provided helpful criticism of an earlier version of this paper; part of that version was presented at a meeting of the American Philosophical Association in Chicago, 25 April, 1975, where my commentator was Hollace Graff. I have also profited from conversations with Bernie Gendron, Nancy Holmstrom, and Bruce Larson.

1. A *Contribution to the Critique of Political Economy* (New York, 1970), p. 21; *Marx-Engels Werke* (henceforth *MEW*), vol. 19 (Berlin, 1964), p. 9. The writings of Marx will be referred to in the following editions, by the indicated abbreviations:

Cap. 1, 2, 3. *Capital*, vols. 1–3 (New York, 1967); German text in *MEW* 23, 24, 25 (1963–1964).

TSV 1, 2, 3. *Theories of Surplus Value*, vols. 1–3 (Moscow, 1963–1971); German text in *MEW* 26.1, 26.2, 26.3 (1965–1968).

Grundrisse. *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)*, trans. Martin Nicolaus (New York, 1974); German text in *Grund-*

As early as 1848 Marx had applied this formula to capitalist production:

Modern bourgeois society with its relations of production, of exchange, and of property, a society that has conjured up such gigantic means of production and exchange, is like the sorcerer who is no longer able to control the powers of the nether world whom he has called up by his spells. For many a decade past, the history of industry and commerce is but the history of the revolt of modern productive forces against modern relations of production, against the property relations that are the conditions for the existence of the bourgeoisie and its rule.²

And much later, in the peroration to the first volume of *Capital*, he returned to the same theme:

The monopoly of capital becomes a fetter upon the mode of production, which has sprung up and flourished with and under it. The centralization of the means of production and the socialization of labor at last reach a point where they become incompatible [*unverträglich*] with their capitalist integument. The integument is burst asunder. The knell of capitalist property sounds. The expropriators are expropriated.³

With such strong sanction for it in the writings of Marx, it is not surprising that the formula has been used to express positions differing widely in substance. Thus we find that according to Lukács, "the material substratum" of the dialectical method is "capitalist society with its internal antagonism between the forces and the relations of production," while Althusser, who has little in common with Lukács except the label "Marxist," says that the "general contradiction" of

risse der Kritik der Politischen Ökonomie (Rohentwurf) (Berlin, 1953).

PW 1, 2, 3. *Political Writings*, vols. 1-3, ed. David Fernbach (New York, 1974).

I have occasionally altered the English translations.

2. *Communist Manifesto*, in PW 1, 72f. (MEW 4: 467).

3. *Cap.* 1: 763 (MEW 23: 791). See also *Cap.* 3: 883f. (MEW 25: 891); PW 2: 131.

society is "the contradiction between the forces of production and the relations of production."⁴

Now taken strictly, the formula expresses the following position:

- (i) The basic contradiction of capitalist production is between the tendency of the productive forces to grow in productivity⁵ with-

4. Georg Lukács, *History and Class Consciousness* (Cambridge, Mass., 1971), p. 10; Louis Althusser, *For Marx* (New York, 1970), p. 99.

5. By productivity I mean productive efficiency, not mere quantity of output. Productivity is measured by the quantity of goods that can be produced by a given quantity of (living) human labor. A special case of the growth of productivity is the development of the capacity to produce something hitherto unproducible. Now though the passages from Marx quoted above make it plain that the basic contradiction involves the growth of the productive forces, they do not make it unambiguously clear what sort of growth is involved. Some commentators have taken him to be concerned primarily with growth in productivity. Plamenatz paraphrases the passage quoted above from the 1859 Preface by saying that "in every society there comes a time, in each stage or epoch of its development, when the further improvement of techniques of production is prevented by what Marx calls the 'relations of production.'" *German Marxism and Russian Communism* (London, 1954), p. 28. According to Bukharin, "if we know what workers are involved, we shall also know what they will produce in a given length of time; these two quantities determine the third quantity, the product turned out. Taken together, these two quantities constitute what we call the *material productive forces of society*. *Historical Materialism* (Ann Arbor, 1969), p. 115. Both authors seem to think of the growth of the productive forces primarily as growth in productivity; in this respect I shall follow them. This interpretation finds its justification in such passages in Marx's works as *Cap. 1*: 40 (*MEW* 23: 54f.). (Note that here the German *Produktivkraft* is rendered in English as "productiveness" rather than "productive power," which is preferable.)

But on another interpretation, the "growth" or "development" referred to in the passages quoted above from Marx is growth in the physical size and complexity of the productive forces and (especially) in the number of people required to produce something of utility. Marx seems to refer to this not only in the peroration to *Cap. 1* but also in *Cap. 3*: 264, 266, 438-441 (*MEW* 25: 274f., 276f., 454-457). Engels places more emphasis on this than Marx: The development of "mighty productive forces" required the transformation of the productive forces "from means of production of the individual into *social* means of production workable only by a collectivity of men. . . . Production has become a *social* act. Exchange and appropriation continue to be *individual* acts, the acts of individuals. The social product is *appropriated by the individual capitalist*. Fundamental contradiction, whence arise all the contradictions in which our present-day society moves." *Socialism: Utopian and Scientific*, in Karl Marx and Frederick Engels, *Selected Works* in one volume (New York, 1968), pp. 418, 433. Of course the two types of growth—growth in productivity and the

out limit, and the limit placed on that growth by the capitalist production relations, where the tendency of the forces to grow is inherent in the forces themselves, and the factors that limit that growth are inherent in the production relations.

We can see that position (i) gives the strict sense of the classical formula by supposing, contrary to (i), that the tendency to grow is not inherent in the forces of production. Then the forces would tend to grow only because they were suitably affected by external factors (for instance, the production relations). And this would mean that the *basic* contradiction would be between those external factors (or the forces as affected by those factors) and the production relations—contrary to the formula. Parallel reasoning shows that the factors that limit growth must be inherent in the production relations, for the formula to apply. Thus (i) captures the strict sense of the formula; to use that formula without special qualification is to express (i).

Moreover position (i) plays an important role in a version of technological determinism that has sometimes been attributed to

development from individual to social production—occur together, at least in the development of capitalism. But they are nonetheless distinct, and it is important to distinguish the two views of the basic contradiction in which each is primary.

On the second view, favored by Engels (though he sometimes seems to express the first view; see below) and followed by Stalin, the growth of the productive forces is in contradiction to the individual appropriation of the capitalists. Individual appropriation could perhaps somehow limit the growth (in this sense) of the productive forces, but Engels never explains how this could happen or even suggests that it does. He instead relies on the contrast between “social” and “individual” to convey the nature of the contradiction. However, it is difficult to see how the contradiction between social production and individual appropriation could be a real antagonism, an antagonism that makes the capitalist structure unstable and in the long run even unviable. To be sure, “social” and “individual” have contrasting meanings, and perhaps it is somehow “wrong” for the collective product to be appropriated individually, in the sense intended by Engels. But neither of these considerations explains why the forces and relations of production are antagonistic in the sense we want: How could the conjunction of social production with individual appropriation be the fundamental cause of the instability of capitalist society? Though I cannot discuss this matter further here, it seems to me that no one has answered this question adequately, and I shall henceforth assume that the growth involved in the basic contradiction is growth in productivity.

Marx and advanced by Marxists. By technological determinism I mean the view that the sort of production relations that obtain in capitalist society (as well as the nature of the "superstructure," which I shall ignore here) is due to the sort of productive forces that obtain, and that changes in those production relations result from changes in the sort of productive forces, not vice-versa. We can distinguish two types of technological determinism. Strong determinism rules out the possibility that the relations of production could ever stand in an antagonistic or contradictory relation to the productive forces, since the relations are *at every moment* determined by the forces. This view is rarely ascribed to Marx, because it does not fit well with the many texts—including those that suggest (i)—that indicate he allowed the production relations at least a temporary autonomy from the forces. According to weak determinism, which is compatible with these texts, temporary antagonisms between the two are possible, though in the end the productive forces have their way.

On either version, technological determinism must ascribe to the productive forces certain *inherent* properties or tendencies to change, properties that the forces do not have by virtue of the existing relations, but which, on the contrary, cause those relations to be what they are. These properties must be inherent, since technological determinism rules out the possibility of an independent source for them in society. Now one version of technological determinism ascribes to the productive forces precisely the same inherent property ascribed by (i), the tendency to grow in efficiency or productivity. For instance, according to Engels:

The expansive force of the means of production bursts the bonds that the capitalist mode of production imposed upon them. Their deliverance from these bonds is the one pre-condition for an unbroken, constantly accelerated development of the productive forces, and therewith for a practically unlimited increase of production itself.⁶

6. *Socialism: Utopian and Scientific, Selected Works*, p. 431. Another version of technological determinism relies on the notion of growth as development from individual to social productive forces (see fn. 5 above). The passages usually cited to show that Marx is a technological determinist—e.g. *Cap.* 1:

This version of weak determinism thus incorporates (i). The basic contradiction is between the productive forces, with their inherent tendency to grow, and the capitalist production relations, with their inherent limit to growth (thus far we have position [i]). Furthermore, this contradiction will be resolved when the forces "burst the bonds" of the capitalist relations and replace them with new unconstraining relations.

Position (i) therefore both expresses the strict sense of the classical formula and forms half of this version of weak technological determinism. In what follows I wish to argue that position (i) is self-contradictory, in that it entails that the tendency of the forces of production to grow is both inherent and not inherent. I shall further argue that position (i) is incompatible with Marx's mature theory of capitalist society⁷ and that despite the evidence presented earlier Marx holds not (i) but the following position:

(ii) The basic contradiction of capitalist production lies within the capitalist production relations: those relations (a) tend to develop the forces of production without limit, i.e. to increase productivity without limit, but also (b) place a limit on the growth of those forces. Thus the forces of production enter into the basic contradiction only as they are developed or limited by the capitalist production relations. Strictly speaking, the contradiction is not between the forces of production and the relations of production.

In sections I–III, I shall explain how (i) is self-contradictory; in sections IV–V, I shall give direct evidence that Marx is most plausibly taken to assert not (i) but (ii).

From these conclusions it follows that only in a loose sense can

372f., n. 3 (MEW 23: 392f., n. 89); *The Poverty of Philosophy* (New York, 1963), p. 109—give no grounds for thinking that Marx held either of these versions to the exclusion of the other.

7. By "mature theory" I mean the theory presented in the *Grundrisse* (1857–1858) and subsequent writings, especially *Theories of Surplus Value* and *Capital*. Although in what follows I sometimes refer to earlier (pre-1857) writings, my account of Marx's theory does not depend upon these references, and I mean to leave open the question of whether, on the whole, Marx's earlier writings present the view I here find in the mature Marx.

the classical formula be used either to report Marx's position, or to express any minimally plausible theory of capitalist society. But when used loosely, the formula is misleading, and we have other, much clearer ways of describing the basic contradiction. It also follows that the sort of weak determinism that incorporates (i) is unlikely to have been held by Marx, since it is incompatible with his mature theory; and in any event it is unintelligible, which gives further reason to doubt that Marx held it and sufficient reason for us to reject it.⁸

I

Both view (i) and view (ii) rely upon the distinction between the capitalist relations of production and the forces of production under capitalist production. Our understanding of these views depends in large measure on our understanding of this distinction. The proper interpretation of the distinction is clearly the one provided by Marx himself, and so it is this that I shall now briefly sketch.

According to Marx, what distinguishes capitalist production from other economic formations is primarily its basic production relation, the relation between the capitalists who control the means of production and the working class comprised of those who do not and must therefore sell their labor-power to the capitalists in order to "earn a living."⁹ Moreover, Marx distinguishes two types of productive forces in the capitalist era, each characteristic of a distinct period: manufacture, or production with hand tools, and large-scale industry, or production with systems of machinery. Since he held that the latter

8. Usually technological determinism is stated as a law applying to all historical epochs; I have restricted it to the capitalist era and its successor, which are the focus of the present paper. But if (as I argue) the restricted version is to be rejected, then the generalized version must be too.

9. "Capital is not a thing, but rather a definite social production relation, belonging to a definite historical formation of society, which is manifested in a thing and lends this thing a specific social character. . . . It is the means of production monopolized by a certain section of society, confronting living labor-power as products and working conditions rendered independent of this very labor-power, which are personified through this antithesis in capital." *Cap.* 3: 814f. (*MEW* 25: 822f.). See also *Critique of the Gotha Program*, *PW* 3: 348 (*MEW* 19 [1962]: 22).

type was the perfected and most appropriate form of the productive forces under capitalism, we must examine it.¹⁰

If we abstract from the factors of industrial production in capitalist production all those features whose possession by those factors at time t presupposes (conceptually or causally) their association at t with specifically capitalist production relations (i.e. primarily with the capitalist-worker relation), we are left with an abstract concept of the industrial forces of production that is applicable to at least some non-capitalist economic formations, though perhaps not to economic formations generally.¹¹ This is Marx's concept of the industrial productive forces, as can be seen from his discussions of machinery and the organization of the producers under capitalist production.¹²

10. On manufacture, see *Cap.* 1, chap. 14 (*MEW* 23, chap. 12); on industry, see *Cap.* 1, chap. 15 (*MEW* 23, chap. 13).

11. This formulation leaves open the possibility that, as Marx thought, capitalist relations were historically (causally) necessary for the original development of industrial productive forces: at time t_2 the very existence of systems of machinery might well presuppose the association at some prior time t_1 of such systems with capitalist production relations. This would not falsify the formulation in the text, which speaks only of concurrent association.

12. It will be helpful briefly to describe Marx's conception of productive forces in general. One obstacle to understanding this conception correctly is the practice of translating Marx's term *Produktivkräfte* both as "forces of production" (the usual translation in those texts, such as the *Communist Manifesto*, which assert the theses of "historical materialism") and as "productive powers" (the usual translation in *Capital*). This gives the English reader the false impression that Marx had two concepts, one (that of forces of production) part of the theory of historical materialism, the other (productive powers) of importance in Marx's analysis of capitalism.

Produktivkraft is defined by Marx in terms of useful labor and use-values: "*Produktivkraft* is naturally always *Produktivkraft* of useful, concrete labor, and as a matter of fact defines only the efficiency of purposive productive activity in a given period of time." *Cap.* 1: 46 (*MEW* 23: 60). See also *Cap.* 1: 40, 314 (*MEW* 23: 54f., 333). Since in all historical epochs labor is useful and products are use-values, the concept of *Produktivkraft* is independent of the special features of any epoch. *Cap.* 1: 42f., and also chap. 7, sec. 1 (*MEW* 23: 57, and also chap. 5, sec. 1). Although *Produktivkraft* is primarily *Produktivkraft* of (a) labor, we can also speak of the *Produktivkraft* of (b) the means of labor (see, e.g., *Cap.* 1: 388, 391 [*MEW* 23: 409, 412]) and even of (c) the object of labor (*Cap.* 1: 40; 181, n.1 [*MEW* 23: 54f.; 196, n.6]). Thus all three factors of the elementary or abstract labor-process are productive-powers: labor,

First consider Marx's distinction between *machinery* and the *capitalist use of machinery*:

While capital gives itself its adequate form as use value within the production process only in the form of machinery and other material manifestations of fixed capital, such as railways etc. . . . , this in no way means that this use value—machinery as such [*an sich*—is capital, or that its existence as machinery is identical with its existence as capital; any more than gold would cease to have use value as gold if it were no longer money. Machinery does not lose its use value as soon as it ceases to be capital. While machinery is the most appropriate form of the use value of fixed capital, it does not at all follow that therefore subsumption under the social relation of capital is the most appropriate and ultimate social relation of production for the application of machinery.¹³

the object of labor, and the means of labor, the latter two comprising the means of production. *Cap.* 1: chap. 7, sec. 1 (*MEW* 23: chap. 5, sec. 1).

As suggested in the text, but contrary to the view of many commentators, Marx also includes within the notion of *Produktivkraft* the technical division of labor among the workers within the labor-process—this is an aspect of the *Produktivkraft* of factor (a). He defines this division of labor purely in terms of use-values and explicitly says that in its general form it is conceptually independent of the specific features of different historical epochs. *Cap.* 1: 42 (*MEW* 23: 56f.). See also *Contribution to a Critique of Political Economy* (New York, 1970), p. 51 (*MEW* 13: 37). The account of the development of relative surplus-value, in *Cap.* 1, sec. 4, is primarily an account of the changes in the technical division of labor, the growth of *Produktivkraft*, under the influence of capitalist production relations. *Cap.* 1: 329, 364, 371, 386 (*MEW* 23: 348f., 386, 391, 407). This view of the technical division of labor follows that of John McMurtry, "Making Sense of Economic Determinism," *Canadian Journal of Philosophy* 3 (1973): 252f. For contrary opinions, see H.B. Acton, *The Illusion of the Epoch* (London, 1955), pp. 159–162; Irving M. Zeitlin, *Marxism: A Re-Examination* (Princeton, 1967), pp. 61–67 (who includes the technical division of labor under both forces of production and social relations of production); Gerald A. Cohen, "On Some Criticisms of Historical Materialism, I," *Aristotelian Society Supplementary Volume XLIV* (1970), 124–127; I.I. Rubin, *Essays on Marx's Theory of Value* (Detroit, 1972), chap. 2. The erroneous view that Marx regarded technical relations as social relations of production is often used to support the ascription to Marx of some version of technological determinism; see for instance Acton and Cohen.

13. *Grundrisse*, pp. 699f. (German text, p. 587). See also *Grundrisse*, p. 702 (German text, p. 590), and *Cap.* 1: 423, 432 (*MEW* 23: 445f., 455), for machinery as the perfected form of capital.

Thus although fully developed capitalist production requires machinery, the use of machinery is possible outside capitalist production relations. Under communism the use of machinery will differ from that under capitalism, Marx tells us in *Capital*; the working class had to learn to oppose not the use of machinery per se but the capitalist use of machinery to extract surplus-value, i.e. to exploit the workers.¹⁴

Marx makes a similar distinction concerning the organization of the producers:

Insofar as the labor of the capitalist does not arise from the production process as a capitalist production process, and therefore disappears automatically with the disappearance of capital, i.e. insofar as it is not simply a name for the function of exploiting other people's labor, but insofar as it arises from the social form of labor—cooperation, division of labor, etc.—it is just as independent of capital as is this form of labor itself once it has stripped off its capitalist integument. To assert that this labor, as *capitalist labor*, as the function of the capitalist, is necessary, only shows that the vulgarian [i.e. vulgar economist] cannot *conceive* the social productive forces and the social character of labor developed within the framework of capital as something separate from the capitalist form, from the form of alienation, from the antagonism and contradiction of its aspects, from its inversion and *quid pro quo*.¹⁵

Industrial production requires the cooperation of large numbers of persons working at different tasks and thus also requires a coordinator or director to ensure that everything works harmoniously; Marx compares this function to that of an orchestra conductor. Although the capitalist entrepreneur happens to have this function, he does not have it *as* capitalist, but rather as aspect of the large-scale productive forces. This purely “technical” control coincides, in the person of the capitalist, with another quite different sort of control, however:

14. *Cap.* 1: 393, n.1; 429 (*MEW* 23: 414, n.116a; 452). See also *Cap.* 1: 422, 441f. (*MEW* 23: 444f., 465); *TSV* 3: 264f. (*MEW* 26.3: 260f.).

15. *TSV* 3: 497f. (*MEW* 26.3: 488). See also *TSV* 3: 496 (*MEW* 26.3: 486f.); *Cap.* 1: 33ff., 424 (*MEW* 23: 350f., 447); *Cap.* 3: 382–387 (*MEW* 25: 395–401).

The control exercised by the capitalist is not only a special function, due to the nature of the social labor-process, and peculiar to that process, but it is, at the same time, a function of the exploitation of a social labor-process, and is consequently rooted in the unavoidable antagonism between the exploiter and the raw material [i.e. the working class] he exploits.¹⁶

The two sorts of control belong to the same person, but they can nonetheless be distinguished: the former but not the latter is "separate from the capitalist form" of production.

Thus whichever factor of industrial production we consider, the machinery (means of labor) or the organization of the producers in the production process, we see that on Marx's view, to be distinguished from the capitalist production relations, those forces must be defined at a level of abstraction sufficiently high that they are compatible conceptually and causally with more than one type of production relation—i.e. with more than one way in which the (non-technical) control of the factors of production can be distributed among people within a society.¹⁷ Considered in abstraction from the capitalist production relations, the industrial productive forces have nothing to mark them as specifically capitalist. As Sidney Hook said, "We cannot speak of feudal or bourgeois forces . . . of production except in a metonymous sense."¹⁸

To say this is not to deny that in capitalist production the forces

16. *Cap.* 1: 331 (*MEW* 23: 350).

17. This characterization of the relations of production receives support from the passages cited in fn. 4, as well as in *Cap.* 2: 34f. (*MEW* 24: 42); *TSV* 3: 422f. (*MEW* 26.3: 414f.); and *Cap.* 3: 791f. (*MEW* 25, 799f.). Marx never developed an adequate general conception of production relations, it seems to me; for instance, using the characterization given in the text, it is hard to see how he could distinguish between slavery and feudalism. Production relations consist in the relations obtaining among people with respect to their control or lack of control over the three factors in the labor-process, i.e. over the forces of production. A further development of this notion, not to my knowledge found in Marx, would distinguish various types of control that people might have over these factors; this would presumably allow us to distinguish the slave-owner from the lord of the manor. See also McMurtry, "Making Sense of Economic Determinism."

18. *Towards the Understanding of Karl Marx* (New York, 1933), p. 68.

and relations of production are two aspects of one concrete process; it is only to say that those aspects are distinct and separable. Nor is it to deny that some important features of the concrete process of capitalist production result from its capitalist form. For instance, according to Marx, production during both the period of manufacture and the period of large industry was marked by a division of labor which assigned each person permanently to one detail-job. But this division of labor was "technically" necessary (an aspect of the productive forces per se, a requirement of the production of use-values with those forces) only in the period of manufacture. Insofar as the capitalist devoted energy to the supervision of this division of labor, he acted as part of the productive forces. After the industrial revolution, with the replacement of hand-tools by systems of machinery, the old division was kept on and supervised by the capitalist (now acting qua capitalist) for purely exploitive, nontechnical reasons: it decreased training-time, and hence the cost to the capitalist of replacing workers, and it made the worker more dependent upon the capitalist.¹⁹ Thus in industry this division of labor resulted from the requirements of *capitalist* production, not from the nature of the industrial productive forces. Under socialist production relations, in which the associated producers collectively control the factors of production, a new division of labor could and presumably would be instituted, which would allow rotation of workers among different jobs.²⁰

As this example shows, Marx's analysis of the concrete capitalist production process involves (in part) sorting out those features of the process that are due to the forces of production (e.g. assignment of one person to one job in manufacture, the need for a coordinator of large-scale production) from those due to the capitalist production relations (e.g. the assignment of one person to one job in industry). The distinction between these two sets of features (and thus their

19. *Cap.* 1: 422 (*MEW* 23: 444f.).

20. On socialist production relations, see *Critique of the Gotha Program*, *PW* 3: 345, 348 (*MEW* 19: 19f., 22); *Cap.* 1: 78 (*MEW* 23: 92f.); *TSV* 3: 525 (*MEW* 26.3: 514). On the division of labor in socialist production, see *Critique of the Gotha Program*, *PW* 3: 347 (*MEW* 19: 21); *Cap.* 1: 488 (*MEW* 23: 512); G.A. Cohen, "Marx's Dialectic of Labor," *Philosophy & Public Affairs* 3, no. 3 (Spring 1974): 235-261.

separability) is the key to Marx's claim that although capitalist relations were historically necessary for the development of industrial productive forces, now that they are developed they can be used for production within socialist relations:

The aspirations of the proletariat, the material basis of its movement, is labor organized on a grand scale, although now despotically organized, and the means of production centralized, although now centralized in the hands of the monopolist, not only as a means of production, but as a means of the exploitation and enslavement of the producer. What the proletariat has to do is to transform the present capitalist character of that organized labor and those centralized means of labor, to transform them from the means of class rule and class exploitation into forms of free associated labor and social means of production.²¹

II

Because position (i) uses Marx's concept of industrial productive forces, it is self-contradictory. To see that this is the case, we must draw out a consequence of this concept. The industrial forces of production are defined at a level of abstraction at which they are separable from capitalist relations. At that level, those forces are in themselves nothing but a means to an, as yet, indeterminate end. To be sure, that end is not wholly indeterminate; any employment of any productive forces, in any historical period, must yield a product (use-value).²² And at different times and places the productive forces place different technical constraints on their employment. Because of scarce materials, ill-developed technology, or the unavailability of

21. First draft of "The Civil War in France," *PW* 3: 256. See also *PW* 3: 334f.; *TSV* 3: 422f. (*MEW* 26.3: 414f.); *Cap.* 3: 264, 819f. (*MEW* 25: 274f., 827f.); "Results of the Immediate Process of Production," quoted in David McLellan, *The Thought of Karl Marx* (New York, 1971), p. 209. On the historical necessity of capitalism for the original development of industrial productive forces, see for instance *TSV* 3: 271 (*MEW* 26.3: 267), *Grundrisse*, p. 325 (German text, p. 231).

22. *Cap.* 1; chap. 7, sect. 1 (*MEW* 23, chap. 5, sect. 1).

skilled producers, it may be impossible to produce certain products well or at all.

But are those products that are produced produced primarily and directly as a means to make profits, and only indirectly for the satisfaction of human needs? Or are they produced directly for the satisfaction of human needs—and if so, whose needs? Again, where technically possible, is some attention given to making production pleasant or even fulfilling for the producers, or is this value sacrificed, so that production becomes an activity disagreeable but necessary to stay alive? Given technical constraints, the specific purposes for which products are produced and the ends to which the forces of production are turned are independent of those forces at this level of abstraction. The industrial forces of production cannot determine their specific employment any more than (to use Marx's phrase) the nature of powder itself can determine whether it is used to wound a person or to dress that person's wounds.²³

The specific employment of the productive forces is instead dependent upon the production relations. These are relations that obtain among people by virtue of their (nontechnical) control or lack of control over the forces of production. The specific employment of the forces of production is determined by the choices of those who control the various factors of production, choices made within whatever constraints the production relations impose upon them. And those constraints can be considerable. For example, according to Marx we have no alternative within capitalist production relations but to use the productive forces primarily and directly to produce profits for the capitalist, and only indirectly and secondarily to satisfy human needs. (Or, to be more precise, the only alternative to this is to suffer severe economic deprivation that is likely in the long run to make life unbearable or to lead to death.) But under socialist production relations, profit is no longer even an indirect goal of production, and the forces of production can and will be turned directly to the satisfaction of human needs.

Let us turn now to the growth of the productive forces. This results

23. Marx to Annenkov, 28 December 1846 (*Poverty of Philosophy*, p. 186).

from two factors: first, the availability of productive forces more efficient than those presently in use and, second, an effective choice on the part of those who control production to employ the new forces, a choice which they make in the light of the specific employment of those forces, a choice which is limited by and perhaps forced upon them by the existing production relations. Thus a tendency to grow cannot be intrinsic to the productive forces—even if we suppose what is by no means obvious, that the productive forces by themselves are the source of productive innovations, i.e. of the *technical possibility* of higher efficiency. Growth depends upon factors independent of those forces, factors to be found in the sphere of production relations.

As examples of this, consider again the cases of capitalist and socialist production. According to Marx, under capitalist relations there is a compelling built-in incentive for each capitalist to increase the productivity of his firm, hence a built-in tendency for productivity to increase at the social level. If a capitalist can produce a commodity for less than his competitors, by using more efficient machinery, then he can increase his profits by selling his commodities beneath the going market price but above his own cost of production. Thus each capitalist always has a motive to employ more productive machinery (or other types of productive force), based on his primary goal of maximizing profits.²⁴

Of course this does not guarantee that innovations and inventions to increase productivity will be forthcoming—though the demand for such innovations on the part of capitalists importantly does give rise to a class of people who attempt to satisfy it. But it is clear that, even if there *were* more effective productive forces available, they would be adopted if and only if those who controlled production desired to have them adopted and could implement that wish within the constraints of the production relations. Even the desire to increase production might result from those relations, as in the case of the capitalist; he seeks his economic self-interest, which *within capitalist relations* means he desires to maximize profits and not to fail in competition, and therefore desires to increase the productivity of his own firm.

24. *Cap.* 1: 312–316 (MEW 23: 335–340); *Cap.* 3: 37f. (MEW 25: 47f.); *TSV* 2: 204–206, 240f. (MEW 26.2: 201–204, 240f.).

By contrast, people within a socialist society, working together in an industrial production process, need not desire to increase productivity, even if the means to do so are at hand. Perhaps the productive forces are already efficient enough to satisfy all their desires for material goods; perhaps, although with increased efficiency they could produce the same amount in less time or no time at all, they do not desire more time free from work; perhaps they find production, as they have organized it, intrinsically satisfying and would not trade off any production time for time at some other activity. If so, then since they collectively control the production process, they would decide to maintain productivity at its current level. The possibility of this happening shows that the mere availability of productive innovations does not by itself lead to their incorporation in the production process. Whether they are adopted depends upon the employment of the productive forces people choose within limits set by, and perhaps as a result of, existing production relations.

III

We are now in a position to see how view (i) is self-contradictory. If the above account is correct, it is incompatible with Marx's concept of the industrial productive forces to regard the growth of those forces as inherent. If the forces grow, the cause must be sought elsewhere, within the production relations with which they happen to be associated. But according to (i), which uses this concept, the tendency of the productive forces to grow is inherent, and thus independent of the associated production relations. Therefore (i) entails that the tendency of those forces to grow is inherent and not inherent.

What (i) requires is a concept of the industrial productive forces which is compatible with their inherent tendency to grow. I have argued that Marx's concept does not satisfy this requirement, but in his writings there seem to be suggested two further concepts of the productive forces that do. Their credentials are worth examining.

Let us approach these two alternative concepts of the productive forces by reviewing the difficulty facing (i). According to (i), the growth of the industrial productive forces is due to those forces them-

selves; if it were not, the basic contradiction would not be between the forces of production per se and those relations. But it is hard to see how the natural and physical properties of the productive forces, including the social organization of production required by available technology (the so-called technical production relations), could cause this growth, just as it is hard to see how the mere natural or physical properties of gold coins could give those coins the power to buy commodities. And according to the analysis of the preceding sections, Marx defined those forces in purely physical-technical terms. Therefore the advocate of (i) might well be tempted to extend Marx's concept of the productive forces, so that those forces are ascribed by definition some further, non-natural and nontechnical property that causes them to grow.

One might first attempt to include in the concept of the productive forces some "social" property that could be responsible for their growth. But Marx's distinction between the productive forces and social relations of production excludes all "social" properties (except the technical production relations) from those forces. Unless we are willing to tamper also with Marx's concept of production relations, draining some of the content of the relations into the forces, this avenue is closed. One way this tampering could be done (there may be others) is by including the working class qua class within the forces of production. This move might even seem to be supported by several of Marx's assertions, one from *The Poverty of Philosophy*, the other from the *Grundrisse*:

Of all the instruments of production, the greatest productive power is the revolutionary class itself.

At a certain point, a development of the forces of material production—which is at the same time a development of the forces of the working class—suspends capital itself.²⁵

As a consequence of this move the production relations are reduced to the capitalist class; the contradiction between the forces and relations of production is assimilated to the antagonism between workers

25. *The Poverty of Philosophy*, p. 174; *Grundrisse*, p. 543 (German text, p. 442).

and capitalists. This assimilation has been imputed to Marx by several commentators. Robert Tucker, describing the basic contradiction, says:

We are told that abstract "productive powers" of society periodically rebel against abstract "relations of production" which become "fetters" on these powers. This is said to be happening again at the present time. Between "labor" and "capital," embodied in the proletariat and the bourgeoisie, a mighty "civil war" is raging across the battleground of modern society. The productive powers vested in "labor," are in rebellion against "capital," which is a "social power" or, alternatively, a "social relation of production."²⁶

And according to Louis Althusser, "the contradiction between the forces of production and the relations of production" is "essentially embodied in the contradiction between two antagonistic classes."²⁷

But as an interpretation of Marx, this has little merit. The passages from *The Poverty of Philosophy* and the *Grundrisse* are equivocal, and readily allow of being understood in a sense compatible with the position ascribed to Marx in the preceding sections. The working class has two aspects. It is *defined* as working class at the level of production relations, as the class of those who do not control the means of production but do control their own labor-power. But the members of the working class, so defined, also enter into the forces of production as members of the collective agent of production. Similarly, the capitalist class is defined as the class of those who control the means of production; but members of that class can and sometimes do act as technically necessary superintendents within the collective agent of production. On this interpretation, the *Grundrisse* passage is simply saying that the development of the working class as a factor of production proceeds *pari passu* with, and in interaction with, its development as revolutionary agent (at the level of production relations, where classes are defined and class conflict oc-

26. *Philosophy and Myth in Karl Marx* (London, 1961), p. 166; see also Tucker's *The Marxian Idea of Revolution* (New York, 1969), pp. 16f.

27. *For Marx*, p. 99. A more adequate assessment of Marx's position appears in *Reading Capital* (New York, 1970), p. 203.

curs). Thus there is no reason to suppose that the mature Marx ever thought the working class *as class* entered into the very concept of the industrial productive forces. I am inclined to think that the passage from *The Poverty of Philosophy* can be read in the same way, but even if I am wrong, this is an earlier statement and can be regarded as expressing a view Marx held at most only during his early years.

If one is disinclined to tamper with Marx's concept of production relations, but still holds fast to the notion that the forces must grow of themselves, one is driven to ascribe to them a non-natural, non-technical and nonsocial property as the basis of their growth. And this property must seem very occult. The productive forces now acquire a supernatural aura, superimposed upon their purely natural-technical being. The temptation to think of the forces in this way might lie behind their description, in *The Communist Manifesto*, as "powers of the nether world" that capitalism, the sorcerer (or more aptly the sorcerer's apprentice) can no longer control. Engels's later description of them as "master demons" might have a similar origin.²⁸

It is difficult to say how seriously Marx or Engels took such imagery, however. Engels especially may have been attracted by the animistic view it suggests of the productive forces. But in Marx the imagery appears only in the early writings, so there is no reason to ascribe this animism to the mature Marx. Indeed, it would be surprising to find that the same Marx who offered a critique of the fetishism of commodities, money, capital, and even the means of production, himself employed a fetishist concept of the productive forces.²⁹

Neither alternative concept of the productive forces has a sound Marxian pedigree. Position (i) cannot be made coherent. And as a corollary, the version of weak technological determinism that incorporates (i) cannot be stated consistently. In other words, within

28. *Socialism: Utopian and Scientific, Selected Works*, p. 429.

29. For further discussion of Marx's theory of fetishism, and more generally of his notion of "false appearances," see Norman Geras, "Marx and the Critique of Political Economy," in *Ideology in Social Science*, ed. Robin Blackburn (New York, 1973), pp. 284-305; and G. A. Cohen, "Karl Marx and the Withering Away of Social Science," *Philosophy & Public Affairs* 1, no. 2 (Winter 1972): 182-203. For Marx's discussion of the fetishism of the means of production, see *Cap.* 3: 825f. (*MEW* 25: 833f.) and *TSV* 3: 485f. (*MEW* 26.3: 476f.).

Marx's conceptual scheme it is not possible to reject technological determinism (at least in this version) as wrong *in fact*; it must be rejected as unintelligible.

IV

If the foregoing is correct, position (i) is self-contradictory because it employs Marx's concepts of industrial productive forces and capitalist production relations. It is a consequence of those concepts that whatever growth the productive forces undergo in the capitalist era must depend upon capitalist production relations; yet (i) denies this. Moreover, we saw that Marx fills in this conceptual structure by providing an account of just how capitalist production relations play a role in the development of productivity. These facts give us some reason to think it unlikely that Marx held position (i). But they do not settle the matter. Perhaps Marx never noticed the conflict between his conceptual scheme and (i). And as we saw at the beginning, he often writes as if he did hold (i), using the classical formula.

Now it is significant that Marx always uses that formula in highly abstract summary passages, such as the 1859 Preface, or the peroration to volume 1 of *Capital*. These passages are so condensed that their meaning must be determined by reference to Marx's detailed accounts of capitalist production, in *Capital* and related manuscripts.³⁰ And when we turn to those detailed accounts, I shall argue, we find that Marx placed the basic contradiction between two distinct aspects of

30. Nonetheless many commentators attempt to discover Marx's theory from a reading of merely those summary passages. Since those passages leave so many questions unanswered, this procedure requires liberal use of one's intuitions concerning what Marx *might* have meant. Typical in this respect, though more explicit than others, is H.B. Acton, who after discussing the 1859 Preface goes on to say: "Unfortunately, in no passage known to me is the distinction between productive forces and productive relationships illustrated by detailed examples, and I must therefore make my own attempt to repair this omission." *The Illusion of the Epoch* (London, 1955), pp. 159f. Such a method of interpretation ignores the wealth of indications concerning the nature of the productive forces which we have seen is to be found in *Capital* and related works. Thus it can arrive at a correct understanding of Marx's position only by chance. For further reasons why one should use the 1859 Preface with caution, see Arthur M. Prinz, "Background and Ulterior Motive of Marx's 'Preface' of 1859," *Journal of the History of Ideas* 30 (1969): 437-450.

the capitalist production relations, the exchange of equal values and the extraction of surplus-value. In those analyses, he presented a version of position (ii). If so, then we have further reason to think that when Marx used the tainted formula, he did not mean to commit himself to (i), or to the version of technological determinism that includes (i). Rather, he used the formula in a loose sense.

First I shall sketch what I take to be the central sense of "contradiction" (or the central type of contradiction) in Marx's economic writings. This concept of contradiction plays an essential role in his general analysis of capitalist production; it is employed in the context of a wide range of topics in all of the economic writings of his maturity. Then I shall argue that in this central sense of "contradiction," the basic contradiction of capitalist production must, on Marx's view, lie within capitalist production relations. Though many of Marx's views on contradiction call for further critical discussion, I shall eschew criticism here, since my main purpose in what follows is to establish the important exegetical thesis that Marx's specific theory of capitalist production is incompatible with position (i). And I shall ignore some of the less important senses of "contradiction" (or types of contradiction) in Marx's writings, though a complete account of Marx's theory of contradiction would require an examination of them.³¹

31. Some of these are referred to only in Marx's early writings; for instance, (1) the contradiction between individual interest and community interest—see, e.g. Loyd D. Easton and Kurt H. Guddat, eds., *The Writings of the Young Marx on Philosophy and Society* (Garden City, N. Y., 1967), pp. 424f.—and (2) the contradiction between the proletariat's human nature and its situation in life (*Writings of the Young Marx*, p. 367). But in his mature writings we also find (3) the contradiction in elliptical motion (presumably of the planets around the sun) between centripetal and centrifugal forces—*Cap. 1: 104 (MEW 23: 118f.)*; (4) the contradiction between two associated social processes which move in opposite directions, e.g. the contradiction (as productivity increases) between the increasing rate of surplus-value and the decreasing number of work-hours relative to a given capital—*Cap. 1: 305f. (MEW 23: 323f., 429f.)*, cf. *Cap. 3: 225, 247–249 (MEW 25: 235, 257–259)*; (5) the contradiction in capitalist production between social production and private appropriation of the product (see fn. 5 above); and (6) the contradiction between the organization of production in the individual workshop and the anarchy of production in capitalist society as a whole—*Cap. 1: 350–359 (MEW 23: 371–380)*—though Marx, unlike Engels, seems never to call this a "contradiction." On other con-

In Marx's analysis of capitalist production, "contradiction" in its central sense means not a logical contradiction³² but rather the relation between the two elements in a polar structure or two phases in a polar process. Perhaps the best way to understand this is to consider an example. In the process Marx calls the metamorphosis of the commodity, a commodity is first exchanged for money (a sale), which is then exchanged for a second commodity (a purchase). The metamorphosis as a whole is comprised of these two poles, moments, or phases—sale and purchase. Though these phases are distinct, and usually separated in time and place, they are internally related in that neither can exist in the long run without the other. If they are separated on a relatively large scale and for a relatively long time—if sellers withhold their money³³ and do not buy—then the circulation of commodities breaks down and there occurs what Marx calls a trade crisis.

The possibility of a crisis, insofar as it shows itself in the simple form of metamorphosis, thus only arises from the fact that the differences in form—the phases—which it passes through in the course of its progress, are in the first place necessarily complementary and secondly, despite this intrinsic and necessary correlation, they are distinct parts and forms of the process, separable and separated from each other. The possibility of crisis therefore lies solely in the separation of sale from crisis.³⁴

Circulation bursts through all restrictions as to time, place and individuals, imposed by direct barter, and this it effects by splitting up, into the antithesis [*Gegensatz*] of a sale and a purchase, the direct identity that in barter does exist between the alienation of

traditions, see below, fn. 44 (crises as contradictions), fn. 49 (the contradiction between the abstract and the concrete), and the end of section V (the contradiction between workers and bourgeoisie).

32. See Adam Schaff, "Marxist Dialectics and the Principle of Contradiction," *Journal of Philosophy* 57 (1960): 243f. Where English translations use the expressions "contradiction," "opposition," or "antithesis," Marx uses the expressions *Widerspruch*, *Gegenteil*, or *Gegensatz*.

33. Or lack money—the case of workers in capitalist production; see section V below.

34. TSV 2: 508 and also 500 (MEW 26.2: 508f. and also 501).

one's own and the acquisition of some other man's product. To say that these two independent and antithetical [*gegenübertretenden*] processes have an inner unity, is the same as to say that this inner unity moves in external oppositions [*Gegensätzen*]. If the external independence of mutually complementary and thus dependent processes proceeds to a certain point, the unity makes itself felt forcibly by a crisis.³⁵

But though the polar structure of the metamorphosis makes possible a trade crisis, it cannot by itself cause one. It is merely the "framework," "abstract form," or "predisposition" of a crisis.

The general, abstract possibility of crisis denotes no more than the most abstract form of crisis, without content, without a compelling motivating factor. Sale and purchase may fall apart. They thus represent potential crisis and their coincidence always remains a critical factor for the commodity. The transition from one to the other may, however, proceed smoothly. The most abstract form of crisis (and therefore the formal possibility of crisis) is thus the metamorphosis of the commodity itself. . . . The factors which turn this possibility of crisis into [an actual] crisis are not contained in this form itself; it only implies that the framework for a crisis exists.³⁶

In Marx's analysis of this contradiction, we can distinguish three factors: first, the background of a specific economic structure, commodity production; second, the contradiction within this structure between sale and purchase; and finally, the associated crisis, the trade crisis.

The general features of this contradiction recur in the contradictions that arise as we move to more complex, determinate economic structures. In each case we find a process composed of two polar phases, separable and normally separated in space and time but unable to exist outside the process as a whole. Thus if we add to com-

35. *Cap. 1: 113f. (MEW 23: 127f.).*

36. *TSV 2: 509 (MEW 26.2: 510).* See also *TSV 2: 502, 515 (MEW 26.2: 502, 515); Cap. 1: 114 (MEW 23: 128); Grundrisse, p. 419 (German text, p. 321).*

modity production the institution of credit, we encounter a new contradiction: the separation of selling into the alienation of a commodity on credit and the payment of the price of that commodity by the debtor to the creditor. (Marx calls this a contradiction between money as measure of value and money as means of payment.) If these two phases are disrupted, what Marx calls a money crisis occurs.

Marx provides the following illustration of such a disruption. A weaver gets thread, looms, and coal on credit from a spinner, machine-builder, and coal-producer; the spinner in turn gets flax, spinning-machines, and coal on credit from the flax-grower, machine-builder, and coal producer; the machine-builder gets coal, iron, and timber from the coal, iron, and timber producers; and so forth. Then the weaver gives the cloth he has woven to a merchant on credit. Now suppose that (for whatever reason) the merchant cannot pay his debt to the weaver. Then the weaver cannot pay the spinner, "the spinner cannot pay because the weaver cannot pay, neither of them can pay the machine manufacturer, and the latter does not pay the iron, timber, or coal supplier. And all of these in turn, as they cannot realize the value of their commodities, cannot replace that portion of value which is to replace their" means of labor and materials. "Thus the general crisis comes into being."³⁷

If we add the buying and selling of labor-power to commodity production with credit, we arrive at capitalist production, and a new contradiction. Direct production and circulation, the two phases of capitalist production as a whole, can fail to mesh properly, yielding an overproduction crisis.³⁸ Even this contradiction is but a "possibility or abstract form of crisis," however; to get a crisis within the frame-

37. TSV 2: 511 (MEW 26.2: 512). See also *Cap.* 1: 137f. (MEW 23: 151f.). Marx presents this as an example of a money crisis in a capitalist system. I have altered it to serve as an example of a money crisis in a simple commodity system.

38. The contradiction involved here differs from that between sale and purchase, because the latter is a contradiction within the circulation process but the former is between the immediate process of production (the extraction of surplus-value) and circulation (exchange of equal values). The production-circulation contradiction could not exist in a simple commodity system. See below, section V.

work of capitalist production, we need a precipitating cause which is not supplied by the abstract form of capitalist production.³⁹

Though Marx sometimes refers to other economic contradictions and crises within capitalist production, these three form the basic series in his analysis. We can set forth this series as follows:

<i>Economic Structure</i>	<i>Contradiction</i>	<i>Crisis</i>
A. Simple commodity-production without credit	Sale/purchase	Trade crisis
B. Simple commodity-production with credit	Money as measure of value/money as means of payment	Money crisis
C. Capitalist commodity-production	Direct production/circulation	Overproduction

According to Marx, these contradictions and crises are cumulative. The occurrence of the third type of crisis requires that of the second, and the occurrence of the second that of the first: the "more abstract forms are recurring and are contained in the more concrete forms."⁴⁰ Moreover the occurrence within a society of one type of crisis requires the occurrence of any more specific type (later in the series) for which there is room in the economic structure, i.e. whose associated contradiction is part of that structure.

We can see what Marx means by this if we consider the relation between trade and money crises in economic systems A and B. Recall the example given above of a money crisis in a simple commodity system with credit (B). The merchant was unable to pay the weaver,

39. *Grundrisse*, pp. 274f., 403 (German text, pp. 185f., 307); *Cap.* 2: 316, n. (MEW 24: 318, n.32); *Cap.* 3: 244f. (MEW 25: 254f.); *TSV* 1: 283 (MEW 26.1: 255); *TSV* 2: 505, 507, 512f. (MEW 26.2: 505f., 508, 513f.).

40. *TSV* 2: 510 (MEW 26.2: 511).

the weaver was as a result unable to pay the spinner, and so on throughout the ramified chain of debtors and creditors, until a money crisis came into being. Now if the merchant cannot pay the weaver, and in general debtors are unable to pay their creditors, the weaver and other creditors (many of whom are also debtors) will have to cut back on their purchases, and people with commodities to sell will be unable to sell them. A trade crisis results. Thus "the second form [of crisis] is not possible without the first—that is to say, without the separation between purchase and sale."⁴¹

On the other hand, if a trade crisis arises in system *B*, a money crisis must come with it:

If the crisis appears, therefore, because purchase and sale become separated, it becomes a money crisis, as soon as money has developed as means of payment, and this second crisis follows as a matter of course, when the first occurs.⁴²

In system *B* many sellers of commodities are also debtors; this is what it means to say that in system *B* there exists a developed institution of credit. Now if the merchant and other debtors are unable to sell their commodities (a trade crisis), they cannot pay their creditors, and a money crisis automatically occurs.

In simple commodity production with credit, then, trade and money crises always occur together. But in simple commodity production without credit (*A*), the first form of crisis occurs without the second, for there is no room for the second to develop; systems of type *A* lack the contradiction between money as measure of value and money as means of payment.

On Marx's view, however, to say that in system *A* whatever trade crises occur, occur by themselves, while in system *B* whatever trade crises occur must occur with money crises (and vice-versa), is to deal in hypotheticals. This is first of all because no such systems have existed fully developed in history: "Developed circulation of commodities and of money . . . only takes place on the basis of

⁴¹. TSV 2: 514 (MEW 26.2: 515).

⁴². Ibid.

capital.”⁴³ It is also because in those cases where we find approximations to systems A and B, no crises have occurred:

Simple circulation of money and even the circulation of money as a means of payment—and both come into being long before capitalist production, while there are no crises—are possible and actually take place without crises. These forms alone, therefore do not explain why their crucial aspect becomes prominent and why the potential contradiction contained in them becomes a real contradiction [*warum der in ihnen potentia enthaltne Widerspruch actually solcher erscheint*].⁴⁴

Therefore we must look to capitalist production and its contradictions for an explanation of the occurrence of trade and money crises; the latter crises occur only in the company of overproduction crises. But neither can overproduction crises occur without trade and money crises:

If purchase and sale do not get bogged down, . . . and, on the other hand, money as a means of payment functions in such a way that claims are mutually settled, and thus the contradiction inherent in money as a means of payment is not realized—if therefore neither of these two abstract forms of crisis become real, no crisis exists.⁴⁵

43. TSV 2: 512 (MEW 26.2: 513).

44. Ibid. What he usually calls “contradiction,” Marx here calls “potential contradiction,” and the associated crisis is now called the “actual contradiction.” Other atypical locutions can be found elsewhere. In the 1859 Preface Marx seems to identify “contradiction” with crisis, which he refers to as the “fettering” of the productive forces by the production relations; in *Cap. 1*: 138 (MEW 23: 152), he contrasts “antithesis” with “absolute contradiction” (*Gegensatz* with *absoluten Widerspruch*) and seems to identify the latter with the crisis; in *Grundrisse*, p. 414 (German text, p. 317), he speaks of “the contradictions which are later released, demonstrated as already latent within . . . the simple concept of capital.” Nonetheless it is clear that the central sense of contradiction is the one discussed in the text. It is more commonly used by Marx, it is used in cases where there are no crises correlative to the contradiction (e.g. the contradiction between use-value and value; see below), and Marx’s less usual ways of speaking of “contradictions” can easily be understood as natural extensions of the central one.

45. I lack space here to discuss Marx’s views on the simultaneity of the types of crises in capitalist production, though the remarks in section V are

In a capitalist system, then, all three crises occur together, and only in that system do any of them in fact occur.

Thus the series of economic structures, contradictions, and crises exemplifies the process of synthetic development described by Marx in the General Introduction to the *Grundrisse*, a process in which we move in thought from simple, abstract models to increasingly complex, determinate, concrete models of society, revising our social theory with each complication of the model.⁴⁶

Underlying the analysis of these contradictions is Marx's analysis of the structure of the commodity itself. Though virtually all products of human labor are use-values, i.e. satisfy some human desire, only in market economies are products typically produced for exchange rather than for direct consumption by the producers. In market economies, products have not only use-value (utility) but exchange-value, and Marx argues that to account for the phenomena of exchange and exchange-value we must appeal to value, or the quantity of labor (subject to certain qualifications) required to produce the product. A commodity, or product produced for exchange, is a unity of use-value and value.⁴⁷

But this "contradictory" or polar structure of the commodity is unlike the contradictory structures of commodity metamorphosis, sale, and capitalist production as a whole, in that within commodity sys-

relevant. The difficult question is the relation between credit (and money crises) and capital (and overproduction crises), on which see *Cap.* 3: chap. 27 (*MEW* 25: chap. 27); *Cap.* 1: 174f., 626 (*MEW* 23: 188, 655); *TSV* 2: 211 (*MEW* 26.2: 208); *TSV* 3: 122, 518 (*MEW* 26.3: 119, 507).

46. *Grundrisse*, General Introduction, section 3, pp. 100-108 (German text, pp. 21-29).

47. For Marx's account of this, see *Cap.* 1: chap. 1. Note that in pre-1866 writings (including the *Grundrisse*, *Contribution*, *TSV*, and *Cap.* 3) Marx used "value" and "exchange-value" interchangeably, contrasting both to "the form of appearance of (exchange-)value." In post-1866 writings (including *Cap.* 1) he identifies "exchange-value" with "the phenomenal form of value" and opposes both to "value." The meanings of "value" and "the phenomenal form of value" remain unchanged. Thus the new sense of "exchange-value" does not betoken any substantive change in Marx's views. But it might mislead the unwary reader, and should be kept in mind when one compares pre-1866 with post-1866 texts. I discuss this in more detail in "A Note on Marx's Terminology," *Science & Society* 40, no. 1 (Spring 1976).

tems value cannot be separated from use-value.⁴⁸ (That the poles are distinct is shown by the existence of products that are not commodities, in noncommodity economies.) Thus there is no crisis correlative to this contradiction. This contradiction is nonetheless the germ out of which grow the contradictions with which crises are associated. The latter develop out of this basic (in the sense of primitive) contradiction according to a conceptual and historical process traced by Marx in chapters 1–3 of *Capital* 1. First, money arises as the external expression or form of appearance of the value of all other commodities:

Commodities first of all enter into the process of exchange just as they are. The process then differentiates them into commodities and money, an external opposition [*Gegensatz*] in which they represent their immanent opposition between use-value and value. In this opposition commodities stand as use-values over against money as exchange value.⁴⁹

48. "Nothing can have value, without being an object of utility." *Cap.* 1: 41 (*MEW* 23: 55).

49. *Cap.* 1: 104 (*MEW* 23: 119). See also *Cap.* 1: 61 (*MEW* 23: 75f.); *TSV* 3: 130 (*MEW* 26.3: 128). Related to the contradiction between use-value and value, and its externalization in the contradiction between ordinary commodities and money, is the contradiction between the concrete and abstract. Value is embodied in abstract labor and is represented by money; the ordinary commodity then represents, in opposition to money, the specific or concrete labor required to produce it (as baking produces bread but not boots). For Marx's discussion of this in commodity production, see *Cap.* 1: 56–59, 103, 114 (*MEW* 23: 70–73, 118, 128); *TSV* 3: 130, 136f. (*MEW* 26.3: 128, 133f.). Marx holds that the abstract (value and abstract labor) contains the essence of commodity production, while the concrete (concrete use-value and concrete labor) is merely the form in which the abstract appears (its *Erscheinungsform*). Alternatively, he says that the concrete represents itself as (*sich darstellt als*) the abstract essence. (This is the core of the theory of commodity fetishism.) For an especially striking discussion of the relation in commodity production between abstract and concrete, see the appendix to the first German edition of *Cap.* 1, available as "Die Wertform," *Marx/Engels Kleine Ökonomische Schriften*, Bucherei des Marxismus-Leninismus, vol. 42 (Berlin, 1955), p. 271; this passage suggests strongly that Marx saw a structural analogy between commodity production, in which abstract labor is the primary independent variable, and Hegel's philosophy, in which (according to Marx) the concrete is merely

When money is opposed to commodities merely in this way, as a measure of the value of those commodities, we do not yet have a contradiction in the sense of a possible crisis. If I express the value of Smith's car by saying that it is worth \$400, I presuppose the opposition between money and commodities, but do not yet use money as a means of exchange. I need not have \$400 to express the value of Smith's car; Marx says I express that value in terms of "ideal money." There is no way to separate the commodity from its price (its value expressed in terms of "ideal money"), and hence no crisis could arise from the failure of these two poles in the expression of value to mesh.

But when we reach the use of money as means of exchange, we find this problem: "The commodity, which exists really as use-value and ideally as price, must be changed into money."⁵⁰ With this, the metamorphosis of the commodity, we reach the beginning of the series of separable contradictions or possible crises.

We now have the extended series of five contradictions: (1) in the commodity, use-value vs. value; (2) in the expression of value of a commodity, the commodity vs. "ideal" money; (3) in the metamorphosis of the commodity, sale vs. purchase; (4) in sale involving credit, money as measure of value ("ideal money") vs. money as means of payment ("real money"); and (5) in capitalist production as a whole, direct production vs. circulation.

As in the shorter series, each contradiction in this series requires its predecessors. In this sense the contradiction between use-value and value is the basis of the contradiction proper to capitalist production, between production and circulation. But the latter cannot be reduced to the first. Moreover, Marx nowhere says that the last contradic-

a form of appearance of the abstract, which is real. See also Lucio Colletti, *Marxism and Hegel* (London, 1973), chap. 12, especially pp. 278–283.

Note that in Part I of *Cap.* 1 Marx seems erroneously to reject the validity of a concept of abstract use-value; he correlates use-value with the concrete, and value with the abstract. See, for example, *Cap.* 1: 46 (*MEW* 23: 61). The opposition between abstract and concrete can be stated without relying upon this view, however.

50. *TSV* 2: 507 (*MEW* 26.2: 508).

tion in the series above is the final or most determinate form of contradiction in capitalist society. When he calls it the basic contradiction in capitalist production, he seems to mean that it is the contradiction that emerges when we complicate our model of society just enough to get a model of capitalist production; it therefore underlies or is presupposed by any more determinate contradictions that we might encounter as we make our model of capitalist production increasingly concrete.⁵¹

It is compatible with, and indeed suggested by Marx's schema that as we take account of such additional factors as the state, world trade, imperialism, or the distinction between finance and industrial capital, we must add further contradictions or forms of crises to our series. Finally, it seems to be Marx's view that, since our model of society must always be abstract to some extent (it must simplify reality), the economic contradictions represented in our models can never be more than *possible* crises. We shall never reach a contradiction which by its own nature *must* develop into a crisis. Some precipitating conjunctural factors must always be present for the crisis to emerge. Nonetheless Marx seems also committed to the view that the more concrete the model of society presupposed by a contradiction, the more probable it is that that contradiction will ripen into crisis. Overproduction crises are more likely to occur in capitalist systems than trade crises in simple commodity production.⁵² It would be out of place to discuss this issue further here, however.

51. *Grundrisse*, pp. 407, 414f. (German text, pp. 310f., 317f.); TSV 2: 512f. (MEW 26.2: 513f.); TSV 3: 55f. (MEW 26.3: 50). Of course, the production/circulation contradiction is also "basic" in the sense relied upon in the introductory section of this paper: it is the contradiction from which arise any other contradictions to be found in capitalist production *as such*, i.e. in that form of production which emerges when we complicate our model of society just enough to get a model of capitalist production.

52. "With regard to the possibility of crisis arising from the form of money as *means of payment*, it appears that capital may provide a much more concrete basis for turning this possibility into reality. . . . Thus the general crisis comes into being. This is nothing more than the *possibility of crisis* described when dealing with money as a means of payment; but here—in capitalist production—we can already see the connection between the mutual claims and obligations, the sales and purchases, through which the possibility can develop into actuality." TSV 2: 511f. (MEW 26.2: 511f.).

V

With this analytical schema at hand, let us now return to the question of where Marx places the basic contradiction of capitalist production. To begin with, both poles of the contradictions arising within simple commodity production lie at the level of social relations. The exchange-relations among independent commodity producers, including those of buyer and seller, creditor and debtor, are social production relations:

In a society of commodity producers . . . [the] general social relation of production consists in the fact that they are related to their products as commodities, hence as values, and that in this material form they relate their private labors to each other as homogeneous [*gleiche*] human labor.⁵³

As this passage suggests, Marx's theory of value is the theory of those production relations that are specific to commodity production in general; to say that products are values is to say that they are produced by independent producers for exchange on the market.

But why should we say that the contradiction specific to capitalist production, the one between production and circulation, lies within the capitalist production relations? Why shouldn't we take "production" here to refer to the forces and not the relations of production? In other words, why shouldn't we ascribe position (i) to Marx, instead of position (ii)? The general answer to this is given by Marx's theory of surplus value. Just as the theory of *value* is the theory of *commodity* production relations, the theory of *surplus* value is the theory of *capitalist* commodity production relations.

According to Marx's theory of value, commodities tend to exchange in ratios determined by their relative values, i.e. by the relative quantities of labor (subject to certain qualifications) required to produce them. Now the basic production relation in capitalist society is that between the capitalist, who controls the means of production, and the worker, who controls only his or her own labor-power. The

53. *Cap.* 1: 79 (*MEW* 23: 93). See also *TSV* 3: 129, 147 (*MEW* 26.3: 127, 145).

exchange between them, of the worker's labor-power for the capitalist's wages, is governed by this same law of value.⁵⁴ Therefore labor-power tends to sell at its value, i.e. for wages just high enough to produce and reproduce the worker—to keep the worker alive and working and raising members of a future generation of workers.

But the application of the law of value to the selling of labor-power produces a striking result, upon which the very existence of capitalist production depends. Since value is the labor “embodied in” or required to produce a commodity, it follows that at a sufficiently high level of productivity labor-power can create *more value* than it itself is worth. This level of productivity is an essential precondition of capitalist production. At or above this level, the exchange of labor-power for wages puts the capitalist in a position to obtain more value at the end of a cycle of production than he had at the start, by making the workers work longer than they would need to work merely to reproduce the value of their own labor-powers. The extraction of this “more value” (*Mehrwert*) or “surplus-value” from the worker by the capitalist is therefore, as Marx says, “a definite social relation of production.”⁵⁵

Moreover, the more productivity rises above the minimal level presupposed by capitalist production, the less time in the workday it takes for a worker to produce a value equal to that of his or her wages. And then, assuming that the workday is not at the same time drastically shortened, relatively and perhaps even absolutely more time is available in the workday for the production of surplus-value. Thus as productivity grows, so does the rate of surplus-value—the ratio between the surplus-value the worker creates and the value of his or her wages. But as we saw in section II, within capitalism there is an incentive for each capitalist to increase the productivity of his firm, which, we can now see, means that there is also a tendency for the rate of surplus-value to increase.

54. Though for reasons peculiar to labor-power, which is not an ordinary commodity, if indeed it should be called a commodity at all. For a discussion of the difficulties of applying the law of value to the sale of labor-power, see Paul Sweezy, *The Theory of Capitalist Development* (New York, 1942), pp. 83–92. For a discussion of the respects in which labor-power is not a commodity, strictly speaking, see Karl Polanyi, *The Great Transformation* (Boston, 1957), chap. 6.

55. *Cap.* 3: 818 (*MEW* 25: 826).

The elements of Marx's account of the basic contradiction of capitalist production are now at hand. He describes the contradiction in a passage in volume 3 of *Capital* which is worth quoting at length:

[The] production of surplus-value completes but the first act of the capitalist process of production—the direct production process. Capital has sucked in so and so much unpaid labor. With the development of the process, . . . the mass of surplus-value thus produced swells to immense dimensions. Now comes the second act of the process. The entire mass of commodities, i.e. the total product, including the portion which replaces the constant and variable capital, and that representing surplus-value, must be sold. If this is not done, or done only in part, or only at prices below the prices of production, the laborer has been indeed exploited, but his exploitation is not realized as such for the capitalist, and this can be bound up with a total or partial failure to realize the squeezed-out surplus-value, indeed even with the partial or total loss of the capital. The conditions of direct exploitation, and those of realizing it, are not identical. They diverge not only in time and place, but also conceptually [*begrifflich*]. The first are limited only by the productive power [*Produktivkraft*] of society, the latter by the proportional relation of the various branches of production and the consumer power of society. But this last-named is not determined either by the absolute productive power [*Produktionskraft*], or by the absolute consumer power, but by the consumer power based on antagonistic relations of distribution, which reduce the consumption of the bulk of society to a minimum varying within more or less narrow limits. It is furthermore restricted by the tendency to accumulate, the drive to expand capital and produce surplus-value on an extended scale. This is law for capitalist production, imposed by incessant revolutions in the methods of production themselves, by the depreciation of existing capital always bound up with them, by the general competitive struggle and the need to improve production and expand its scale merely as a means of self-preservation and under penalty of ruin. The market must, therefore, be continually extended, so that its interrelations and the conditions regulating them

assume more and more the form of a natural law working independently of the producer, and become even more uncontrollable. This internal contradiction [*innere Widerspruch*] seeks to resolve itself through expansion of the outlying field of production. But the more productive power [*Produktivkraft*] develops, the more it finds itself at variance with the narrow basis on which the conditions of consumption rest. It is no contradiction [*Widerspruch*] at all on this contradictory [*widersprechsvollen*] basis that there should be an excess of capital simultaneously with a growing surplus of population. For while a combination of these two would, indeed, increase the mass of produced surplus-value, it would at the same time intensify the contradiction [*Widerspruch*] between the conditions under which this surplus-value is produced and those under which it is realized.⁵⁶

Assuming the law of value, the workers cannot possibly purchase enough to realize the surplus-value extracted from them; they can only purchase the value of their wages. Unless the surplus-value is realized in some other way, the process of direct production ("the first act") will not mesh with the process of circulation (realization, "the second act"), and a crisis will ensue. And matters keep getting worse, as the rate of surplus-value grows; thus remedies must grow increasingly potent to prevent the crisis.⁵⁷

56. *Cap.* 3: 244f. (*MEW* 25: 254f.).

57. Unlike earlier contradictions in the series, therefore, this one contains within it not merely the logical possibility of a crisis, but an actual tendency towards crisis. In the metamorphosis of the commodity we find no reason for supposing that sale and purchase will fail to mesh properly; in capitalist production as a whole we find an increasing threat to the ability of production and circulation to mesh. But even here we have no certainty that a crisis will occur; perhaps surplus-value can be realized by means other than selling it to the workers, for example, by selling it to capitalists, or members of still other classes, or to the government. These and other possibilities must be taken into account. See fn. 49 above. Perhaps it will be objected that the basic contradiction of capitalist production is the falling rate of profit. But the falling rate of profit is neither an economic contradiction nor a crisis strictly speaking. At best, it is a precipitating cause of overproduction crises, i.e. a cause of the failure of production and circulation to mesh. See *Cap.* 3: 241f. (*MEW* 25: 251f.),

Now what is crucial about the "production" pole of this contradiction is not that it is production of use-values or even of commodities, but that it is production of surplus-value or of profits (which are a form of surplus-value), the exploitation of the working class. The "production" pole does not lie at the level of the forces of production, which are defined purely in terms of production of use-values, but at the level of capitalist production relations, as described in the theory of surplus-value. Therefore the circulation-production contradiction can be described much more concretely and illuminatingly as the contradiction between: (a) in the direct production process, the extraction of surplus-value from the workers by the capitalists, on a scale that increases constantly relative to the value of wages, because of the impetus in capitalism towards development of the productive forces and hence the depression of the value of labor-power; and (b) in the process of circulation, the exchange of equal values, including the exchange of labor-power for wages between workers and capitalists. And this is precisely the sort of contradiction required by position (ii): (a) and (b) are distinct aspects of capitalist production relations, aspects covered by the theory of surplus-value and the theory of value (and of wages) respectively.

The passage just quoted from *Capital*, volume 3, is not an anomaly. Similar remarks can be found throughout Marx's mature economic writings. Perhaps the most concise and yet explicit text on the basic contradiction, though, is the following from *Theories of Surplus Value*:

Sismondi is profoundly conscious that capitalist production contradicts itself [*sich widerspricht*]; he is aware that, on the one hand, its forms—its *production relations*—stimulate unrestrained development of the productive forces and of wealth; and that, on the other hand, these relations are conditional, that *their* contradictions of use-value and exchange-value, commodity and money, purchase

and Sweezy, *The Theory of Capitalist Development*, p. 147. For a recent assessment of the law of the falling rate of profit see Geoff Hodgson, "The Theory of the Falling Rate of Profit," *New Left Review*, no. 84 (March/April 1974), pp. 55–82.

and sale, production and consumption, capital and wage-labor, etc., assume even greater dimensions as productive power develops. He is particularly aware of the fundamental contradiction [*Grundwiderspruch*]: on the one hand, unrestricted development of the productive forces and increase of wealth which, at the same time, consists of commodities and must be turned into cash; on the other hand, the system is based on the fact that the mass of producers is restricted to the necessities [*sic*].⁵⁸

Here again Marx places the basic contradiction in the context of a series of increasingly complex economic contradictions, and makes it clear that each pole of that contradiction is an aspect of the capitalist production relations. This text also returns us to a problem encountered earlier: What is the contradiction between wage-labor and capital that Marx refers to here? It does not appear in the series of economic contradictions developed above, yet it is closely related to them and in its way is just as fundamental to Marx's theory as the "basic contradiction" between production and circulation.

Marx refers to the contradiction between classes throughout his writings; the following description is representative:

[James] Mill does not gloss over the contradiction [*Gegensatz*] between capital and labor. The rate of profit must be high so that the social class which is free from immediate labor may be important; and for that purpose wages must be relatively low. It is necessary that the mass of laborers should not be masters of their own time and slaves of their own needs, so that human (social) capacities can develop freely in the classes for which the working class serves merely as basis. The working class represents lack of development in order that other classes can represent human development. This in fact is the contradiction in which bourgeois society develops, as has every hitherto existing society.⁵⁹

58. TSV 3: 55f. (MEW 26.3: 50), my emphasis. See also TSV 3: 84 (MEW 26.3: 80); TSV 2: 492 (MEW 26.2, 492f.); *Cap.* 3: 249, 250, 257 (MEW 25, 259, 260, 268); *Grundrisse*, pp. 414f., 422, 706 (German text, pp. 317f., 325, 593).

59. TSV 3: 97f. (MEW 26.3: 93). See also TSV 3: 276 (MEW 26.3: 271); *Grundrisse*, pp. 271f. (German text, pp. 182f.). An early formulation appears in *The Holy Family*; see *The Writings of the Young Marx*, p. 367.

This contradiction is obviously an incompatibility between the interests of the two classes essential to capitalist production, the working class and the capitalist class. Thus Marx speaks of "the opposition [*Gegensatz*] of class interests."⁶⁰ In the general form of opposition of class interests, this contradiction exists in all class societies. But in bourgeois society it takes the specific form of the fact that the working class lacks control over the means of production, and must therefore submit to capitalist exploitation as a condition of survival.

In other words, the labor-capital contradiction is a rearrangement of the contents of the production-circulation contradiction. The latter is between two aspects of the capitalist-worker production relations, the former between the two classes related in direct production and circulation.

According to Marx, the incompatibility of class interests in capitalism is veiled by the nature of the exchange between worker and capitalist; it does not automatically threaten the capitalist system. But just as the economic contradictions can be precipitated into crises, so the incompatibility of interests provides the basis for overt class conflict. Thus Marx speaks of the "antagonistic character of the capitalist mode of production" showing itself "in a fierce strife of classes" in France and England.⁶¹ Presumably one precondition of the emergence of overt class conflict is that the workers gain an understanding of the incompatibility of their interest with the interest of the capitalists, an awareness of the exploitation veiled by equal exchange.

The question of the interplay between the series of economic contradictions (and their associated crises) on the one hand, and the capital-labor contradiction (and its development into overt conflict) on the other, cannot be discussed here. But the abstract possibilities seem to be these: economic crises could be exacerbated or even precipitated by overt class conflict; crises could turn the capital-labor

60. *Cap.* 1: 14 (*MEW* 23: 20).

61. *Cap.* 1: 15 (*MEW* 23: 21). For the veiling of capitalist exploitation by the exchange relation between worker and capitalist, see *Cap.* 1: 176 and chap. 19 (*MEW* 23: 189-191 and chap. 17), *Grundrisse*, pp. 239-250 (German text, pp. 151-162), and Cohen, "Karl Marx and the Withering Away of Social Science."

contradiction into overt conflict, or else intensify an already overt struggle; and the parties in an overt class struggle could use an economic crisis as an opportunity or a weapon in that struggle.

One might be tempted to regard the capital-labor contradiction as the fundamental contradiction of capitalism; after all, Marx says that history is the history of class struggles. But Marx never calls this contradiction "fundamental," as he does the production-circulation contradiction. That should settle the question, so far as Marx's terminology is concerned. The question is trivial, however. Each contradiction plays an essential role in Marx's theory of capitalist production and its demise, and their roles are importantly different. Both are "fundamental," in the sense explained in section IV. But this should give no comfort to those who wish to saddle Marx with position (i), for both contradictions lie within the production relations of capitalist society.

Even if all the arguments presented here are acceptable, they do not show beyond a shadow of a doubt that when Marx used the classical formula he did not mean to express position (i). It is possible that he never got quite straight in his own mind the content of the basic contradiction. But surely the evidence strongly suggests that when Marx spoke of "the contradiction between the forces of production and the production relations," he was not using the formula strictly, but rather as shorthand for "the need of capital to expand the forces of production, and the limit capital sets on that expansion." In any case, no matter what Marx thought, no adequate theory of capitalist production can embody position (i).