

Bargaining — Assimilation — Bargaining

A Fragment of an Economic Drama in Four Acts

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Prologue

How do the institutional changes, perhaps the most important ones in the Hungarian economy of the 1970s, find their reflection in the business world of a medium-sized enterprise in the chemical industry? The present study is a fragmentary attempt to answer this question. We try to capture the modification of institutional relations at three nodal points: (1) the tightening of inter-CMEA relations; (2) the strengthening of sectoral control over enterprises; (3) a central development program together with the reemergence of the trustification concept.

We shall present these changes through a bargaining process consisting of a "positive" and a "negative" phase, concentrating our analysis on the fate (the emergence, formulation, and frustration) of a development decision initially of minor and then of steadily growing significance. We would like to demonstrate how the development initiative of the enterprise, with the assistance of the controlling organs, outgrows its own capabilities, to what extent the enterprise is responsible for this, and what it does when it finds itself confronted, in the form of quasi instructions (interstate agreements, central development program, trustification plan), with a substantially changed variant of its original endeavors.

In addition, we also consider the possibilities which, during this intermingling of the levels of economic policy, suggest a radical transformation of the institutional type and industrial status of the

enterprise. This transformation extends from a medium-sized enterprise incorporating the spirit of the 1968 reform, exhibiting dynamic and profitable development, relying on its own resources, and opening up toward the West, to its change into a specialized, trustified big enterprise living on the umbilical cord of the state and tied to the CMEA market. At the same time, we also want to illuminate the organizational experiments of the enterprise: its original institutional relations, what it is ready to give up in the course of its assimilation and to what extent it wants, or is able, to restore its initial position.

Our attention is focused on the development by the Budapest Chemical Works of a herbicide called Oltirel and its fitting into the CMEA agrochemical agreements together with the central development program of the Hungarian pesticide industry. The analysis extends — after a brief survey of some important historical antecedents — to the events relating to the industry and its enterprises during the mid-1970s.

In the subtitle of the study the reader will find an unusual designation: "A fragment of an economic drama." This is because the story, embedded as it is in the context of a strange development process and having a plot with unexpected turns, tense conflicts, and a central character, may appear to the interested reader to be dramatic from a stylistic point of view. It is a story which made it possible to observe the changes of the institutional system in the reform economy in statu nascendi. The final conclusions of the underlying research are contained in a work in Hungarian (with exact references) three times as long as the present study. While, however, the above-mentioned development process as described in the more comprehensive study constitutes just a single thread in the story of the enterprise's assimilation in its broader sense, in this shorter paper we were compelled to swap roles. We concentrated our attention on the calvary of the Oltirel development (on the bargaining process and the alternatives of Western versus Eastern cooperation), accepting, necessarily, some risk of simplification. Thus, instead of a "drama" we present here merely a "drama fragment," which, however, is similar to the original in its most relevant characteristic: it does not lead to a cathartic ending.

ACT ONE

A Brief Account of the Location and History of the Enterprise

1975-79. Budapest, Kén [Brimstone] and Illatos [Fragrant] Streets.

It is at these two sites that the parent factory of the Budapest Chemical Works (BCW) is located. As a medium-sized enterprise operating profitably under the supervision of the former Ministry of Heavy Industry and developing uninterruptedly for several years (in 1975 it attained 2.6 billion forints' worth of production with a work force of 2,000 persons and gross fixed assets of one billion forints), it has significant traditions to rely on in the industry.

Historical research on the industry traces the family tree of the enterprise as far back as 1876. The firm, the first to produce chemical fertilizers in Hungary, owes its rapid expansion to its monarchwide cartel agreements. In 1928 it merges into Hungaria Ltd., its main supplier of basic materials, founded between 1890 and 1892 as a result of an Austro-Hungarian "interstate" exchange agreement (chemical industry in exchange for mining rent). The latter makes rapid headway and in a few decades becomes the most significant enterprise in the Hungarian inorganic chemicals industry. Although during the First World War and Great Depression it mainly relies on its products for industry, it preserves throughout its leading position in fertilizer production and marketing. During the period between the two world wars it carries out major developments with state assistance, concludes noninterference contracts with rival companies, and represents the principle of vertical expansion with extreme consistency (from opening mines to fertilizer promotional activities).

From the end of the Second World War until its nationalization in 1949, the enterprise, employing more than 4,000 people, is still largely engaged in adjusting to its reconstruction. The outstanding achievement of this period — laying the foundations of the Hungarian organic pesticides industry (DIT, HCH) — already finds the technologically interconnected plants organizationally segmented: the Budapest Sulphuric Acid Factory on Kén Street and the Hungarian Chemical Works on Illatos Street. The agrochemicals section is divided, with pesticide production being transferred to the chemical works and fertilizer production remaining at the sulphuric acid factory, although the prevailing economic policy promotes the production of basic chemical materials, strengthened anyway before the war, in both economic units. Central economic management favoring an organizational concentration of the industry goes beyond the reconstruction of the most important plants that was started in the late 1950s by reuniting the earlier Hungarian plants in 1962 under the name of Budapest Chemical Works. What lies behind this reorganization is again a development experiment of long-term sig-

nificance, the adoption of synthetic polymers as a preparatory step before large-scale production is launched in the countryside.

The decade following the amalgamation is a period when an agriculture-oriented policy gained ground in Hungary: the formulation, first in Hungary, of imported active ingredients into pesticides; the development of new plant protection agents and of independent formulation-research activities, which helps to fill a major production gap caused by the prohibition of chlorinated hydrocarbons (e.g., DDT); manufacture of specific fertilizer types. Although agrochemical products make rapid headway, they do not displace the BCW products designed for industrial use (sulphuric acid, hydrochloric acid, caustic potash, etc.) nor its third product line, including a few special chemicals (molecular sieve, electrolytic salts, hardening agents, processing of animal products, etc.).

BCW acquires the overwhelming bulk of the agents and intermediates needed for its modern agrochemical products from Western imports, while in producing basic chemicals it relies primarily on raw materials of socialist origin. During the 1970s it is engaged, first and foremost, in producing pesticides and chemical fertilizers and sells them almost exclusively on the home market. Between the years 1970 and 1975 the enterprise doubles its output with practically identical production factors, as a result of which it rises by the end of the period to the rank of enterprises referred to as good, medium-sized by Hungarian standards. Although its share in the production of domestically manufactured pesticides declines in the meantime to less than half its previous share (from over two-thirds to one-third), even in the face of sharpening competition it retains its title "the largest Hungarian pesticide factory," a title not always to be capitalized on unambiguously.

Outstanding among the competitors is Nitrokémia (accounting jointly with BCW for close to 60% of total Hungarian output in 1975). Among the other members of the Hungarian Chemical Association, only the North Hungarian Chemical Works and the Perenarton Chemical Factory can boast appreciable results in pesticide production. Disregarding the activities of a few cooperatives in the chemicals industry — not insignificant in themselves — only the pharmaceutical factories making some inroads into the sector during the past decade appear as really formidable rivals, in the first place, Chinoin, Alkaido, and the Kibánya Pharmaceutical Factory (Richter), the three of them accounting by 1975 for a quarter of Hungary's pesticide output.

Since it supplies a decisive proportion of its agrochemical prod-

ucts to the Hungarian market, BCW is compelled to enter into a close organizational relationship with Agrotárszt, its "perpetual" monopoly customer, supplying Hungarian agriculture with industrial articles, and with the latter's supervisory organ, the Ministry of Food and Agriculture.

But this customer is at the same time also a seller in relation to the Chemical Works (buying active ingredients from its own import quota and transferring them for formulation purposes to domestic industrial enterprises) and as such also makes the enterprises compete for the allocation of the generally profitable formulation deals, not to speak of the occasional import of competitive final products. In addition, the ministry — relying on its world-famous network of plant protection — also exerts an immense impact on the research-development activity of the industry. To the specific power position the Agrotárszt occupies in the market must be added its monopoly in warehousing and crediting in the field of turnover, the role of the ministry as a pricing authority, and further, the fact that by specifying the absorptive capacity of the domestic market, it also determines indirectly the export opportunities of the productive enterprises.

The above, almost unambiguous subordination is somewhat mitigated, paradoxically, by the fact that the Hungarian pesticide market avoids the situation of a seller's market, uncomfortable even to a monopolistic customer, only by competition from imports, amounting to over half of domestic consumption and becoming increasingly expensive.

The Budapest Chemical Works has, as a rule, "only" the usual problems that arise between industry and foreign trade with Chemolimpex, its main supplier (and exporting contractor). This is because a significant proportion of the raw materials supply is transacted according to provisions laid down in socialist interstate agreements; and once the deal has started moving the usually large volumes, it is, more or less, a routine procedure. But it is probably less usual that the enterprise, having pursued a sound business policy free from any serious indebtedness, gains thereby full recognition from the financial organs and rises to the rank of so-called "bank stars" (people or institutions having relatively easy access to credit). Sympathy for BCW is also nourished by the hope — however illusory it may prove later on — that in the wake of import substitution, the rise in domestic pesticide prices may be somewhat slowed down, and that some of the substantial state sub-

sidy, amounting sometimes to over 50%, could then be saved.

Surveying the antecedents of our story, we have seen the Budapest Chemical Works as an enterprise faithfully preserving the traditions of its business policy. But the representation of traditions like commitment to agriculture while "standing on several legs," the endeavor to take possession of the vertical production structure as a whole, the experimenting role in the sector — all these can also be interpreted as a peculiar kind of defensive behavior: as precautionary measures aimed at preventing the cyclically expanding industry-oriented production from annihilating once and for all the agricultural orientation of BCW or its ancillary plants. Thus the preservation of traditions defers a decision between the alternatives of an industrial or agricultural orientation up to the early 1960s (the time when massive pesticide developments began at the enterprise).

The general change in the climate of economic policy characterizing the subsequent decade (rehabilitation of agriculture, the spread of large-scale cooperative farms, priority development of the chemical industry, and as a result, the putting into operation of several large facilities in the countryside to produce basic materials, relaxation of economic isolationism, etc.) abruptly expands the market for agrochemical products and stimulates a rapid unfolding of the allied industries, as well as diminishing significantly the pressure the state exerts on BCW to produce basic chemicals for industrial purposes. In addition, the influx of Western technology, the first cooperation ventures, as well as the opening of the world market for active ingredients and intermediaries increasingly relieve the enterprise of its yoke of self-sufficiency and provide at the same time a more secure background for a necessarily flexible and risky agrochemical development.

Toward the end of the 1960s the Chemical Works reaches a resting place: the pressure of constraints preventing an agricultural orientation is weakening, and the 1968 economic reform facilitates the realization of the idea, cherished for a long time, of pesticide specialization.

But along with expanding room for the forces of economic policy, some indications of restriction, in a different sense, also make themselves apparent. It is at the turn of the 1960s and 1970s that the first significant fruits of the agrochemical developments started at the time of the reamalgamation begin to mature. With their instinctive inertia, these developments strengthen the effects of the more and more conspicuous new constraints which, instead of pre-

venting, actually directly promote the agricultural specialization of BCW. The emergence of new rivals, the intensification of the labor shortage in the capital, and the increasing rigor of environmental protection — these are the three long-term considerations which eventually induce the enterprise to embark on its path.

Under pressure from provincial pesticide producers, from modern basic materials manufacturing enterprises, and from pharmaceutical factories as new entrants into the pesticides industry, the Chemical Works has hardly any alternative but to raise, through internal restructuring, the share of pesticides in its output. It is increasingly within this product line that its experiments with different plant sizes and soon accepts even its expulsion from "Paradise," Budapest (the opening of a new site in the countryside in 1972-73). Thus the driving forces inherent in interfirm competition push BCW's gross production value of pesticides higher and higher. Consequently the demand arises for the production of a few, large-volume leading products. And if the enterprise does not wish to step onto the path toward such specialization, then it should strive to preserve its "in-house" production of basic materials at least at the level already attained, which increases the pressure for growth already inherent in pesticide specialization ("rushing ahead").

In elaborating the long-term specialization plans, the management draws on the past rather than the future, enjoying thereby the comfort of extrapolation, underpinned by international comparisons.

The volume of pesticides used by Hungarian agriculture grows (true, from almost nil) nearly fourfold at current prices during the 1960s, while in the meantime imports expand eightfold, and by 1970 they come close to domestic production in value terms, which also increases two and a half times during that period. The initial prices are usually high, which is explained not only by the initial monopoly position of BCW, and by the protectionist attitude of economic management, but also by the fact that this area of production belongs to the strongly monopolized progressive sectors in the developed industrial countries. The pesticides industry has a very low investment intensity, and as regards continuous production, it can be ranked among the chemical activities with relatively low basic materials and energy consumption. Although it is rather difficult to ascertain the profitability of its products even in retrospect, the idea that their application is markedly profitable is deeply rooted in the minds of a great many Hungarian specialists in the industry.

Yet we cannot accuse the BCW of drifting with the tide and surrendering, in the fever of the boom, to the spontaneous driving forces of compulsive growth. Just the contrary; the enterprise management is fully aware that the "new rich" period for the industrial branch will soon come to an end: that as a result of the continuous penetration of rivals, the conditions of competition will become harder, and that the threat of import substitution makes it increasingly necessary to switch from formulations resulting in relatively small savings to the domestic production of active ingredients and intermediates. And this in turn calls for the carrying out of production tasks which are more sophisticated and, from the point of view of profitability, much more hazardous as well. For there can hardly be any doubt that the Budapest Chemical Works, which is as regards formulation in a monopoly position, understands what lies behind the myths about the superprofitability of domestic pesticides production in the 1960s. This is, as a matter of fact, the dominance of formulation activities, which can hardly be sustained. (Formulation activities, which involve a few technically simple and economically transparent work phases, or in which the specific comparative advantage of the industry and the general comparative advantage of the Hungarian economy can be adequately made use of.)

Though lightheartedly reaping the fruits of rapid growth, the enterprise, being aware of the future consolidation of the market, exhibits traditionally thoughtful behavior on the issue of specialization. It does not forget about the continuous updating of its equipment for basic materials production, nor does it commit itself to development that outstrip its own resources; and it continues to pay attention to forming research and development reserves to be realized when it appears to be opportune. True, the share of pesticides production in total enterprise output between 1966 and 1975 exceeds in value terms the magic 50% limit and approximates 60% and, combined with other agrochemical products, even 80%, whereby the fact of specialization becomes irrevocable. Nevertheless a few built-in guarantees diminish the risks of the process, such as the maintenance of the (limited) dominance of formulation activities, the preponderance of domestic marketing, the proliferation of Western technological imports — reexports — and other cooperation ventures, the almost complete abandonment of CMEA exports, etc.

The enterprise's independent search for ways and means is also promoted by substantial institutional changes during the late 1960s.

The Chemicals Trust, manufacturing practically everything from perfumes to explosives, is replaced by the Hungarian Chemical Association, also with a varied product range. But the removal of the basic functions of the trust is nevertheless accompanied by the maintenance of a considerable portion of the trust apparatus, now deprived of its substantive tasks. The new institution, which is not the result of voluntary initiative, is characterized by a double loyalty. Legally, it is subordinated to the member enterprises, but in fact it often fulfills ministerial orders and performs a transmission function.

The steadily increasing "propensity of the association to re-trustification" is also supported, among other things, by dissent among the enterprises and by the failure of the first "cartel"-building attempt of the Budapest Chemical Works. BCW first insists that the association should not go beyond the company framework, emphasizing that it regards the new meso-organization primarily as a board of managers and not as an apparatus under the leadership of a president also approved by the ministry. It calls in question the organizational autonomy of the association and, in opposition to the Ministry of Heavy Industry, does not agree to its revival as an independent mediator.

Although BCW largely gets rid of the trustlike supervision, it fails to gain the support of the association. And this may involve an irreparable loss to an enterprise which, in the production of pesticides, is autonomous enough to think about further specialization but not oligopolistic enough simply to outpace rival enterprises newly entering the industry. The Budapest Chemical Works needs to be concerned not so much about its leading positions but rather about maintaining them undisturbed (above all, about the shortage of intermediates and active ingredients, which arises as a result of the parallel development of formulation activities).

Given that the enterprise commands the largest formulating capacity in the industry, it would like the interfirm turnover of these materials to be open and multilateral, since it is very sensitive to the sometimes erratic market situations that arise from shortages. Although BCW does not, in general, deny the sense of competition, in this case it calls on its partner enterprises to agree on sharing their respective product range to bring about some harmonization among their envisaged developments.

While the Budapest Chemical Works takes an active part in the process of persuasion launched for the adoption of Hungarian pesticide production and for official recognition, it also actively pro-

motes the concentration of intellectual resources that were extremely fragmented in relation to the requirements of chemical innovation. During the 1970s a large-scale sectoral research program, partly of an agrochemical character, begins under the title "Biologically Active Compounds." The enterprise still warmly welcomes this, which, however, it would hardly do if it also knew some of the unfavorable consequences of the program.

Meanwhile, BCW's "cartel" aspirations come up against the indifference, and often the active opposition, of its partner enterprises. This attitude is also motivated, together with the fear of a new "trust leader," by lack of interest: for the less specialized small or medium-sized plants — even if they are operating within a larger enterprise organization — are also interested in the unorganized market, flexibility, risk-taking, and "guerrilla warfare" carried on within the institutional system (in the "free plundering" that goes on in the newly rich industry).

If, however, interfirm competition dooms the "cartel" initiative to failure practically at the very outset, as soon as it appears to be impossible to resolve the consequences of compulsive growth through organizational expansion within a looser framework, then theoretically there only remain two possibilities of mitigating the difficulties: (1) to strengthen and expand individually and to increase self-sufficiency — this is BCW's path; (2) to establish a more centralized, medium-level institution in the industry for the "organization" of the market — and this is the solution favored by the association and the ministry.

The sectoral ministry, however its authority may be restricted by the (rather ambiguous) provisions of the reform, does not leave the scene of a more direct form of economic control and brings its pressure to bear either from the background or openly (also through the association) on the enterprises concerned. Yet, all in all, the few years after the introduction of the reform bear evidence of more limited sectoral control within heavy industry, which is also extensively acknowledged by the Budapest Chemical Works. (True, this practice of economic control, called in trade parlance the method of "keeping on a long leash," can also be traced back to the fact that the BCW is not one of the units which are problematic from the economic point of view.)

BCW survives the first third of the 1970s, even if in a somewhat muddled fashion, still as a "typical reform enterprise," presumably one of the few in large-scale state industry. True, at that time it still bears all the essential characteristics of the previous method

of economic management (such as the danger of an arbitrarily selective development policy, the partial survival of direct sectoral control, participation in the association with its propensity to re-establish the trust, monopolized suppliers and customers, strong tendency toward self-sufficiency in an "unorganized" market, etc.). At that time the enterprise skillfully amalgamates — and this is incomparably more important — three institutional formations in its economic activity: basic chemicals production that can function in the framework of large-scale enterprises and that is suitable for direct physical control; pesticide production that can be turned into a modern medium- or large-sized undertaking; and the manufacture of special chemicals in a conservative small-scale enterprise. Diversification in the early years of the reform also involves the peaceful coexistence of these three institutional formations. With our knowledge of BCW's pesticide specialization, we must assume, for the time being, that with the passage of time, it is the institutional formation built around it that will consolidate and become legitimate.

That the breakthrough to a virtually independent, modern, large-scale undertaking is about to take place in the life of BCW is indicated not merely by the provisions of the reform but also by numerous other traits often negligible in themselves, many of which have characterized the business policy and organizational circumstances of the enterprise for a long time (before their time). Such characteristics are: a pioneering, initiative role in technical development; a sound business policy avoiding indebtedness; vertical cooperation with big Western corporations; continuous prosperity with a limited monopoly position; medium-scale enterprise behavior, often asserting the requirements of profitable operation even before the reform; endeavor to establish direct organizational relations with certain suppliers of raw materials and customers in the agrarian sector; reserve capacities formed because of the seasonal fluctuations of domestic demand; the personal commitment of the enterprise leadership to implement the reform; the authority and immunity it enjoys within the pesticide industry, etc.

ACT TWO.

Oltref Enters the Scene: Bargaining about Development

We have reached the boundary of a period when the main events of

our story pile up, and we are at the turn of a plan period, the transition from the Fourth to the Fifth Five-Year Plan, amidst unusual world economic shocks. Thus the action will, to a certain extent, reflect an exceptional situation. Nevertheless we hope that through the specific, unusual reactions of the economic institutional system to these shocks, we can also provide deeper insight into the everyday, normal behavior of this system.

The period 1974-76, linking the two plans, also witnesses a radical change in economic policy. Looking at BCW's Fifth Five-Year Plan, it appears at first glance as if no serious change in its development trend could be expected, and as if the planners of the enterprise, encouraged by the spectacular overfulfillment of the previous medium-term plan, would do nothing but try to complete the process by which BCW would become a pesticide manufacturing enterprise. But looking at it more closely, we are aware of a surprising phenomenon: in the chorus singing the praises of an independent service for Hungarian agriculture, the advantages of diversification, the priority of formulation activities for almost a decade and a half, we can also perceive dissonant voices. Large investments within the framework of credit allocations amounting to several hundred million forints, socialist export orientation, increased self-sufficiency in active ingredients, reliance on ministerial intervention, etc. — all these points separately, and especially combined in this way, sound somewhat different from the usual tune. The most important novelties in the enterprise's business policy aims can virtually be summed up in a single word: Oltref.

This brand name covers a modern herbicide family serving primarily the protection of valuable garden cultures intolerant to pesticides, but it can also be applied in growing leguminous plants such as soybeans, an indispensable plant for world food supply. Elianco, a U.S. company, was the first to put this product on the market during the early 1960s and to take out a patent for it under the name Treflan, as well as for its active ingredient, valid until the late 1970s. So far only an Italian and an Israeli firm, with BCW to follow immediately, have succeeded in coping with the technological difficulties of its production. The background to its production is promising: at the end of the 1960s Hungarian agriculture imports Treflan, and it is favorably received by specialists and the agricultural community at large, and so no certification or approval problems are likely to arise. Soon domestic formulation of the American active ingredient (trifluralin) also begins, expanding the production experience of BCW and promoting research.

In 1972 the enterprise starts to build a smaller (pilot) plant where the active ingredient for the product is produced by three patented procedures, though protected only in the socialist and developing countries. It is an immense advantage that the compound itself need not be reinvented, and in this respect the development is unambiguously a reproductive one. But the suspicions that invariably arise in the case of similar innovations (as to the originality of the technological procedures) are immaterial to us, since the Western system of product patenting would not apply even to a perfectly new technology if used to make an identical end product, and anyway, the relationship between Elianco and BCW will go wrong, as we shall see, not primarily because of doubts over imitation.

The first steps in Olitrel development are taken in much the same spirit as the cautiously evolving pesticide specialization. Based on the beaten path of domestic marketing, the enterprise sets in motion a small investment using its own design and implementation (it is a plant with an annual output of 800 to 1,000 tons of final products or, because of the roughly 25% concentration, 200 to 250 tons of active ingredient per annum, with the possibility of subsequent expansion) which, by the way, appears to be free from any risk. It requires, on the one hand, only a credit to the tune of ten million forints, and part of this would be raised from funds already assigned to the privileged sectoral research field already mentioned. Thus it is not necessary to depart from the well-proven method of "picking up" commitment-free credits (from such sources as funds for purposes of relocation, energy conservation, abatement of air pollution, transport development, etc.). On the other hand, BCW can refer to a 1971 decree of an interdepartmental commission of the government which puts a quota on capitalist pesticide imports. By demonstrating the "sacrifice" of import substitution, it can get an informal guarantee from high-level executives in agriculture to set the domestic price of the final product somewhere near the world market Elianco monopoly price, which contains significant extra profit (\$3,000 to \$3,500 per ton or 180,000 to 210,000 forints per ton), and to fix it for a few years ahead. In addition, the sizable increment in production value to be achieved through a rather modest volume expansion, the rise in the enterprise's profit margin, the fortunate absence of domestic competition (and thus the lack of veto and altercations within the association), as well as the Western relations embodied in the continued American equipment and intermediates deliveries — all these suggest that the usual characteristics of the enterprise will be preserved quite securely within the fairly

sovereign institutional framework of (what we shall call hereafter) dwarf-Olitrel development.

But the product in question, also independently of any external considerations, includes the possibility of a development far beyond the boundaries of Hungary, both on the demand and the supply side, because:

1. the three foreign firms making this long-needed chemical product have hardly penetrated the markets of socialist and developing countries, and the American patents will soon lapse;
2. within the CMEA, BCW is ahead of its only rival, the Soviet Union, in the research and the introduction of the product family;
3. and what is perhaps most important, even if the active ingredient is produced domestically, it will be necessary to import the major part of certain equipment and intermediates. (According to the most optimistic estimates of domestic and socialist deliveries, close to 90% of the materials used are of foreign origin, of which about half would come from capitalist countries.)

Although at that time BCW can no longer evade the effects of the pressures toward compulsive growth, it pays little attention to the potential for international cooperation and mainly relies on the domestic market alone. Top management is still pervaded by the conviction that if it is worthwhile at all to think about any complex cooperation arrangement, then it should definitely involve an expansion of the already existing American relations. More exactly, such cooperation should involve the transformation of the previous simple purchase of the active ingredient into an exchange (reexport) transaction based on a vertical division of production. (Anyway, a return to the American technology would not mean losing the Hungarian procedure, as it could still be utilized to manufacture a joint product of Olitrel.)

The above consideration appears reasonable not only because of the American origin of the product, nor because, along with the saving of investment funds in a few production stages — as a result of counterdeliveries — most of the difficulties of foreign marketing will be eliminated. Neither is it decisive, in all probability, that the enterprise has already been transacting similar exchange business with an Austrian firm, also for the manufacture of an organic chemical product and with favorable results.

Anyway, at the beginning the overall picture is still rather blurred: in the absence of negotiations in depth, it is not the assumed and, by the way, unclarified advantages of Western cooperation, but rather the almost indisputable disadvantages of a possible

(and later unquestionable) alternative solution — of cooperation based on Eastern raw material imports and product markets — that increasingly carry weight.

In the meantime a consistent system of argument is becoming crystallized in the leading circles of the enterprise to justify distrust in the complex forms of either bi- or multilateral CMEA cooperation. Also supported by all the familiar drawbacks (noncommittal promises of demand, lack of discipline in contract fulfillment, absence of interenterprise relations, a nil-balance attitude, bilateralism, etc.), these circles often refer to the bias toward inorganic chemistry of the competent CMEA organ, the Standing Committee of the Chemicals Industry (which, by the way, is mainly engaged in ensuring mutual deliveries of a few raw materials and final products laid down in interstate agreements). In addition, mention is often made of the inevitably deficient experience of Interchim, an integration organization founded in 1969, designed to harmonize cooperation in the field of pesticides.

True, BCW is making every effort to build "market" elements into its socialist external economic relations by its specific means of establishing contacts (delegating, repeatedly, a specialist trained in the Soviet Union, shifting CMEA committee meetings and scientific conferences onto an interfirm level, indirectly influencing interstate negotiations, etc.). But these attempts, even if they were not largely defensive, could hardly be regarded by the enterprise as a secure basis for so multifaceted a cooperation, which requires, as in the case of Olitref, reliable deliveries of several intermediates and additional materials in small consignments, let alone the performance of the routine tasks of scientific-technological cooperation.

Moreover, by means of these market-substitution efforts (particularly in an industry with military applicability), it is likely to be difficult to ascertain whether there are parallel research and development activities in process elsewhere, and if there are, at what level. This might be of vital importance to BCW if it decides to drop the American business and lets Elianco capture the CMEA market, thereby running the risk that an international agreement, excluding its own participation, might be concluded.

Nonetheless, at the beginning, reluctance about socialist cooperation rarely constitutes a subject for debate at the enterprise or in its institutional environment. Owing to the substantial Western import content of the product in question there is practically no inducement from above to bring about a change in approach.

Prior to the world market price explosion, when it is less difficult to find hard-currency counteritems in intra-CMEA input transactions, central and sectoral economic policy mostly takes a firmer stand against converting dollar imports into ruble exports. This standpoint is still more strongly held at the industry level, considering the still high net Western imports in the chemical industry. It is also true that at that time those interested in Olitref development still conceive of socialist cooperation — on the model of the American cooperation idea — as an exchange transaction within a single production chain. But not for very long...

The objectives of socialist integration are built into the development program almost overnight, in spite of the barely concealed reservations and sporadic protestations of the enterprise. BCW is not yet fully ready with its development of the production technology for Olitref, the small-scale Olitref plant is still under construction, and the production costs cannot yet be calculated in advance when a top official of the Ministry of Heavy Industry takes the responsibility at Interchim in 1973 for the supply of Olitref to CMEA as a whole. (At the preparatory negotiations the enterprise did not commit itself to expanding its capacity.) According to the commitments made in its name, which only become clear several months after the Interchim decision, BCW, as the sectoral "host" of the product, should almost double its originally planned volume of Olitref output, even without taking into account the unpredictable volume of Soviet demands. In addition, the CMEA agreement concerned envisages a simple final product specialization. Thus, from the point of view of production, the enterprise has to rely on its own resources and (if the worst comes to the worst) to handle by itself counteritemizing pesticide deliveries from Romania, Poland, and the GDR from 1976 on and for at least five years.

No doubt such a central decision may have, in principle, favorable consequences for the economy as a whole, yet it channels economic management onto the forced path of direct central control. And this is also true if — assuming the most favorable case — it is possible to ensure, through a multitude of individual-exceptional regulators to be discussed later on, efficiency conditions comparable to the presumably very favorable domestic market situation (or to the assumed American exchange transaction) for BCW. Similarly, the precedent-creating effect of sectoral intervention is worth considering, even if some of the earlier doubts about CMEA cooperation subsequently prove justified and provide excuses for evading the agreement (exaggerated demands, hardly co-

ordinated even within the individual member countries; protracted price disputes during the enterprise negotiations; constant evasions in the case of nonperformance of contract stipulations, even if the multilateral agreement is reduced to a bilateral pesticide agreement, as in the case of the Hungarian-Romanian exchange).

The ministry acquires indirect legal title to its autocratic and unexpected decisions, like the above decree involved with concentrating power, as outlined later. And the direct legal title, inseparable from the indirect one, is provided by the fact that the enterprise does not, as a rule, decisively refrain either from participating in CMEA cooperation or from sectoral development ideas not yet formally approved but tending to approach the level of a central development program (the sector's research program, credit preferences, etc.). Moreover, along with the industrial coordination of research programs, it is the Budapest Chemical Works itself that takes several steps in order to propagate the idea of the indispensability of the industry in general and of Olitref in particular in the minds of specialists working in the leading sectoral and functional organs. There begins a process that might be called, for want of a better term, "positive bargaining" (which in the Ministry of Heavy Industry is often referred to, with an ironic simplification, as "milling"). As a first step in this process, the enterprise begins a large-scale campaign of (self-) promotion, primarily for acquiring the investment funds required for its dwarf-Olitref project.

Moreover, while insisting on the unlimited absorptive capacity of the socialist market, BCW itself is the first to raise the idea of establishing (some time in the future!) a large enterprise with an output to meet all needs. That this is a matter testifying to the inherent inertia of reasoning, to the operation of inherited reflexes rather than to an appropriate action program, is supported, among other things, by the fact that as soon as the plan for Interchim cooperation assumes a more definite form in the preparation process, the enterprise backs out in a hurry or tries to set tough conditions as a price for joining the project (demand for a CMEA bank loan; complementing the CMEA price, amounting, presumably, to little more than half the domestic price of Olitref, and that in a direct way, namely, by cutting the price of Soviet phosphate imports used by BCW for fertilizer production rather than in the form of an indirect allowance difficult to define).

Thus, to put it briefly, BCW "sells" its Olitref twice: first, when offering it for sale in the market, but also much earlier, when putting its fate into the hands of its sectoral superiors. In the

meantime, however, the competent (and ever more competent) ministerial officials become increasingly aware of the value of the commodity concerned, and the most important decisions affecting its future gradually slip out of the enterprise's control. Meanwhile, BCW repeatedly offers the sectoral authority the possibility of self-justification and self-identification (recognizing, reluctantly, the need to undertake international commitments, holding out the promise of various services in return for the credits being applied for, bargaining for compensation), which is, in another approach and viewed as a general tendency, tantamount to a slow assimilation, an insertion (merging) into the system of direct sectoral control, accompanied by the partial obliteration of the above-described institutional type of the enterprise. Initially, BCW believes that it gives just an inch. But the form of development assumes an independent life, the investment assignments are inflated in the course of time, and all that reaches the enterprise itself is a few scraps of the consequences of proliferating central decisions.

Because it hardly set about planning the expansion of the dwarf-Olitref plant in the spirit of the Interchim requirements (the pill is subsequently sugared by a general pledge from the Ministry of Heavy Industry to compensate it for the price losses incurred), BCW finds itself confronted with the difficulties of the unpredictability of real Soviet needs. The Soviet Union does not take part in the original CMEA agreement, or more exactly, it announces its intention to make arrangements for self-sufficiency, by making products of the Olitref family; but until then, it is willing to accept small quantities of them from Hungary. Thus in the first phase of expansion in the market for Olitref, account must also be taken of limited exports to the Soviet Union in addition to satisfying the demand of the European socialist countries.

The new situation worries BCW not only because even these limited Soviet deliveries cannot be estimated with any degree of precision (according to sporadic information, this demand may range from a few hundred tons up to a volume surpassing the original CMEA needs of about 2,000 tons), nor because BCW was afraid of competition in the near future, but also because the American cooperation, far from forgotten by BCW, might be frustrated. Notably, Elanco might yield to the temptation of the business opportunity inherent in the construction of a 10,000 ton per annum capacity pesticide (Olitref) factory in the Soviet Union if it received such an offer at the negotiations carried on there. The Budapest Chemical Works protects itself against the uncertainties of CMEA

specialization (thus the investment estimates are rising again) in its own way — by a further exploration or an artificial expansion of domestic and convertible export demand with more favorable price conditions. In the meantime it does not discontinue its negotiations with the American firm.

The confusion is further enhanced by the fact that at intergovernmental meetings, the possibility of a big Soviet factory being constructed as a joint CMEA project also arises, a plan which would presumably invalidate most of the development efforts made so far by the Hungarian enterprise. A further complication is caused by the simultaneously emerging plan (allegedly also supported by Soviet agricultural officials) which regards it as a viable project to locate this giant-Oltref factory in Budapest. In any case, the Ministry of Heavy Industry obliges the Budapest Chemical Works to take full account of this possibility too. (By way of information: all these developments are still the events of the last two years of the Fourth Five-Year Plan, when the dwarf-Oltref plant had not even begun operation.) The outlines of the program for a large investment, necessarily located in the countryside and with a capacity of close to 20,000 tons per year, requiring perhaps several billion forints, are taking shape. This is a concept from which BCW would earlier have refrained without hesitation. But now it is beginning to weigh the potential benefits of a giant-Oltref project — although during the negotiations with its supervisory organ the enterprise's reservations with respect to the development issue are growing because the temptations are enormous, and not only for the American concern striving to control the socialist market. True, the mammoth development in question would disintegrate the existing enterprise organization and invalidate the earlier highly "paternalistic" methods of internal management. Nor is it certain that the new large enterprise would come under the control of BCW. The technical risks of the big investment, excessive pesticide specialization as reflected in the huge increase in output, and finally, the commitments to the state following from the expected indebtedness (to put it in enterprise parlance: "beggar's staff" and "leading string," i.e., doomed to beggary and put on the state's strings) also discount some of the temptation.

Nevertheless the giant-Oltref does have one attractive feature which may offset the above considerations: by its very scale and the direct involvement of the state, it offers BCW a secure chance of survival. Giant-Oltref may make it possible for the enterprise to meet the above-mentioned growth challenge by an abrupt increase

in its pesticide output, and what is more important, the protection of the state might save it the trouble involved in conquering foreign markets and being relocated in the countryside. Also, it might thereby take possession of some capacity in organic basic materials, easily convertible in the future, which would significantly diminish its technical dependence, allowing it to preserve its leading positions in the industry even in the event of a possible institutional recentralization.

But other advantages might also accrue to the enterprise: the large volume might ensure profitable production even at depressed prices; the responsibility for buying and selling can be passed on to the central organs or, by their intervention, to other enterprises; the CMEA market can be monopolized, etc. In addition, it would be naïve to underestimate, or simply to ignore, the attraction of "monument building," of performing a spectacular, creative task.

Since, however, the Soviet Union, the most important partner on the demand side (accepting, allegedly, the advice of the leadership of its chemical industry) withdraws from the joint investment plan a few months later, the preparatory work is broken off. On the surface BCW reacts to the new situation ambiguously, half-relieved, half-disappointed; "in the deep layers" of the enterprise, however, a slow reassessment of its attitude toward development begins.

Positive bargaining reaches a turning point. The abandonment of the giant-Oltref plan definitely alerts the enterprise management to the danger that its entire business policy might involuntarily become a function of interstate agreements, in the course of which the fate of pesticide development as a long-range central objective of BCW would be influenced by the almost uncontrollable play of forces outside the enterprise. The different supervisory organs and international bodies might make agreements over the head of BCW about constantly changing investments, while it is assigned the less enviable task, usually through the sectoral ministry, of elaborating newer and newer detailed programs for the currently approved development projects (often relying, in addition, in the absence of appropriate information, on mere guesswork or empty talk). And meanwhile time passes...

The Interchim agreement, should the prospects for the suggested business take a turn for the worse, can still surely be "reinterpreted" or its implementation obstructed. Since, however, Oltref is increasingly reduced to a subject of bilateral, Hungarian-Soviet negotiations, the enterprise, aware that it is in the possession of a hard export product, highly valued as a counteritem in CMEA

exchange by government organs, must perceive the change in the times and the increasing rigor with which socialist commitments are treated in the country.

Narrowing the scope of institutional changes becomes especially inconvenient when the giant project is taken off the agenda, and with it the arguments for some institutional expansion. BCW begins to view Oltref development, its own original project, with an increasingly ambivalent feeling, and thus its methods of bargaining also assume a more defensive character. Less self-promotion and the semblance of an outsider's attitude: "Our development program can be expanded almost without restriction if we get sufficient assistance from our higher organs" — this is how the enterprise policy was formulated before. "If expansion must be undertaken, it cannot be harmful to the original efficiency of the business" — sounds more like the new policy. However substantial the difference in mood may be between the two approaches, they have one thing in common: neither attacks the inflated character of the investment. In our view the positive bargaining process begins to change into a negative process when BCW shifts from its already rather passive-defensive behavior, which, however, is still not opposed to expansionary goals, and tries to return to its original point of departure, to the dwarf-Oltref project.

The diametrical change in its policy can, as if in a model case, be studied clearly in the Oltref variant included in the Fifth Five-Year Plan of the Budapest Chemical Works. The giant program, even in its curtailed form, leaves an unmistakable mark on the new investment project (it envisages a plant having a capacity of 9,000 tons per annum, relying, to a significant extent, on temporarily maintained Soviet orders); but the suggested approach to its implementation already testifies to far-reaching caution. No doubt the demands of the enterprise for preferential credits are still significant: the 450 million forint's worth of investment expenditure envisaged by the medium-term plan, largely with external backing (possibly through a CMEA bank), climbs at once to 700 million. In addition, the prospective plan drawn up simultaneously by the enterprise foresees a further credit of 500 million after 1980. It is also true that BCW adjusts to the prevailing requirements not only in an abstract-ideological way, emphasizing the consonance of these development objectives with the endeavors of central economic policy, but by asking for new, palpable "favors," it also makes room for a multitude of state (sectoral) interventions, which it also thereby acknowledges. These interventions are as follows: a central design

nation of the general contractor for the project; ordering a partner enterprise to speed up its preparations for producing a vitally important intermediate for Oltref (but if the sectoral ministry arranges to import it from socialist sources, that will also do); approval to discontinue a BCW product containing a basic material similar to that of Oltref; improvements in the supply of packaging materials: these are all important interventions sought with a view to ensuring assistance in concluding agreements, specifying the product range and ancillary plants, solving supply problems, which, when they appear later in the form of direct instructions, should not take one by surprise.

But a kind of caution permeates even these requests: their acceptance may make the course of investment, and later production, undisturbed, while their rejection does not cause any serious losses because the enterprise — what circumspect prudence! — draws up, along with what we might call "large Oltref," also a "small Oltref" program, which hardly requires any preferential treatment.

Thus what the enterprise envisages is, as a matter of fact, nothing more than the mobilization of the reserve capacity of the dwarf-Oltref plant (capacity which is hardly recognizable to the outsider and deliberately concealed by the BCW) with a final output of already close to 3,000 tons per year, as against the earlier 1,000 and the subsequent 2,000 tons. This is how they imagine the first step toward a possible large Oltref investment, with a minimum level of investment (20 to 25 million forints) to satisfy domestic and the most basic Interchim needs. This development project, even if the more ambitious program should fail, will stand on its own feet, and the rest is not the enterprise's concern.

The breaking down of the investment process into phases reflects — with some exaggeration — the schizophrenic spirit of BCW. On the one hand (a) the internal logic of the enterprise's evolving pesticide specialization and of the modern business undertaking stimulates the promotion of Oltref as a potential competitive main product and thereby a rapid increase in the proportion of own-produced active ingredients; (b) as a result of an involuntary concentration on the fate of this product, or in the "hope" of a not solely self-conceived big investment, the enterprise planners slip out most of the alternative development concepts, forcing the enterprise to run after its money and insist on Oltref. On the other hand, in the extremely uncertain decision-making environment outlined above, this constraint must certainly be relaxed, and in drawing up the medium-term plan it is very risky to stake everything

on the one chance. Although BCW, in compliance with its business policy traditions, comes dangerously close to this hazardous state, around the years 1975-76, it slowly realizes that the magic of the illusions raised by the giant-Oltref might paralyze its subsistence reflexes for a whole plan period. It draws the lesson from the regular contingency of its previous development variants and — as far as it can — will behave more warily in the future.

ACT THREE

Interfirm Cooperation and/or Interstate Specialization: Transition to Negative Bargaining

Thus the state of positive development bargaining ends with gradual disillusion. The more sober enterprise behavior is attributable, aside from the factors referred to above, primarily to two things: the conclusion of the first Soviet-Hungarian agrochemical agreement and the final failure, not wholly independent of the above agreement, of the American reexport business.

After protracted negotiations the final version of the agrochemical agreement is signed in December 1975, envisaging, in essence, Hungarian pesticide deliveries in return for Soviet chemical fertilizer exports. The agreement is valid for the period 1977-80, and with an annual value of 60 to 70 million rubles it exceeds the most significant cooperation in the chemical industry so far concluded between the two countries, the so called Olefin project.

The agrochemical agreement can be regarded, virtually, as a first step in the implementation of the CMEA chemicals target program approved in Alma Ata in 1975 and valid up to 1990. This program is based, in principle, on the idea that the Soviet Union specializes in the course of the cooperation scheme in large-batch production of raw-material- and energy-intensive products of the heavy chemicals industry, and for this purpose develops gigantic facilities in various locations. The other countries — including Hungary — undertake the manufacture of products requiring human capital, in the light chemicals industry. Eventually, in concluding the agreement three pesticides (in addition to Oltref) made at four Hungarian factories are taken into account.

The Hungarian pesticide industry, with its long-term participation in the Soviet market, is assured of the accelerated development planned earlier. So, at least, announce the competent officials of the Ministry of Heavy Industry and the Ministry of Foreign

Trade, signing the agreement on behalf of the Hungarian side. Ministerial circles also regard it as beneficial to the Hungarian national economy that the nitrogens and potash fertilizers to be acquired as counteritems for pesticide exports will obviate the need to build a new fertilizer factory. In addition, according to computations by the Ministry of Heavy Industry, there is some hope of saving on Western imports and thus also of increasing exports to the West.

This is because, first, the Soviet chemicals counterbalancing the export of pesticides with a high Western import content could also be bought for hard currency; second, the Soviet partner also commits itself to place, besides fertilizers, some basic materials and intermediates indispensable for the production of pesticides at the disposal of the Hungarian partner; and third, the domestic capacity expansion needed for the satisfaction of Soviet demands will, presumably, also result in some growth of Western exports.

Although the increase in domestic pesticides production requires immense investment expenditure (the construction of new plants is planned for the manufacture of three out of the four products), the Ministry of Heavy Industry sees no other way to implement the maturing central development program (see below), also including the pesticides and pharmaceuticals industries. More exactly, it is persistently striving to link the priority development of the product group in question with the above agrochemical agreement, equally justifying the latter's necessity by the former's inevitability, and conversely.

Under the agreement both parties commit themselves to create the required capacity from their own resources, to resort to re-exports only with permission from the other party, and to coordinate the prices and technical parameters annually. They also determine to conclude their transactions in a deferred nil-balance form. This means that the Hungarian active balance that developed up to 1980 is to be replaced in the years to 1985 by a larger adverse balance, and deliveries should also continue at least at the achieved level. According to the original plan, BCW is to supply pesticides at a rate of 1,500 tons per year after 1980, gradually raising its deliveries to that level after 1977.

The planned cooperation in the chemical industry is not disjunctive in the future either, as the Soviet Union, for example, in the case of the Oltref, will in all probability not rely exclusively on imports of certain products but will invariably build up its own productive basis. While the Soviet partner carries on its own

specialization, the Hungarian side engages in forced pesticide exports, primarily to allow the country to purchase fertilizers. The main domestic rationale for concluding the agrochemicals agreement is likely to be found not in the efficient development of the Hungarian pesticide industry and its market penetration, but rather in the relatively cheap fertilizer imports fixed in an interstate agreement. This, at least, is what the case of Oltref seems to suggest. The agreement is, in some respects, nothing other than an increasingly bilateral variant of the 1973 Interchim agreement, preserving its multilateral character only with respect to the products. As such it contains "ancient" Soviet pesticide demands, the satisfaction of which will become a condition for fertilizer exports a few years later. For that matter, the pesticide exports themselves might of course be profitable.

For lack of competence we are not entitled to pry into the macro-economic efficiency of the exchange deal, just as we are not in the case of the Interchim agreement. But that it is, presumably, not the internal profitability of the pesticides business that is predominant among the motivations of the agrochemicals agreement appears to us confirmed — in the absence of a thorough knowledge of the decision-making process — by two indirect but very probable arguments, to confine us again to the example of the Oltref project.

1) In the years 1975-76 alarming news about a fall in the price of this product is heard, yet the product used to be regarded as an extraprofitable commodity.

The former Oltref price of over \$3,500 per ton fell below \$3,000 on the world market. This is also reflected — in addition to the anyway unfavorable dollar-ruble exchange rate — in the Soviet price offers, which, owing to the large volume of planned deliveries, can set an example for the other CMEA countries. (Chenolimpex attributes the rapid and steadily accelerating price drop to the dumping maneuvers of Elianco: the Americans, asserts the Hungarian foreign trading enterprise, would like to prevent their potential competitors from entering the market before the lapse of their patents in 1978, and for this purpose they are even ready to sustain temporary losses. They are also involved in making socialist prices fall at a faster rate by accepting minor Soviet orders below the already declining world market prices.)

On the hardening of conditions for its export commitments, BCW repeatedly puts forward to its controlling organs the idea of the need for some price compensation. It maintains that with the

volume of exports being lower than formerly expected, its business is losing money (and not just in comparison with domestic marketing) even if an exact substitution is made in terms of both quality and time by Soviet deliveries to replace part of Western material imports. In the preparatory negotiations of the agrochemicals agreement, the Ministry of Heavy Industry itself is faced with less satisfactory offers than it expected. This explains, among other things, why the ministry refrains from supporting BCW's application for a preferential bank credit to implement its large Oltref investments when in 1976 the enterprise five-year plans are evaluated by the planning jury, and why it instructs BCW to cut down the size of the new plant (planned to have a capacity of 6,000 tons per annum) and to step up Western exports of the product. This also explains why the ministry orders that the two intermediaries required be produced by a partner enterprise, and why it begins to elaborate the rules of an export-import price equalization fund, promising that it will make every effort to compensate BCW for its possible export losses; that is, it admits the fact of the deficit.

2) More graphic than the pricing issue are the internal efficiency problems demonstrated by the way the American cooperation idea emerges from time to time and is dropped again. Elianco, having been informed about the tentative plans of the giant and the large Oltref projects and about the operative efficiency of Hungarian technology, and presumably not wanting to be ousted from the European market, renews its proposal for vertical cooperation on a re-export basis. BCW would gladly join in the American business (by keeping both chances alive it might improve, for the first time in the long process, its bargaining position in both directions), as the joint venture would also guarantee the supply of intermediates and offer the possibility of large-scale production, while in all probability not excluding exports to the CMEA countries of part of the final product (in which case BCW would play the role of an advanced bastion). Thus it would have — apart from an independent active-ingredient basis — all the benefits of a Soviet cooperation.

In addition, substantial savings could be effected in the investment phase of the active-ingredient synthesis and of formulation), it would be possible to be associated with well-tested production techniques of long standing, and the reexports are also unlikely to be transacted at less favorable prices. True, without a European certificate of origin (at that time Hungary was not accorded most-favored-nation treatment), the imported materials would be highly

taxed; but it can also be assumed that Elanco would perhaps not resort to the dumping weapon against its cooperation partner. (The application in the present case of such "determined" marketing methods also reflects peculiar reactions because this is how the American firm responds to the fact that BCW, concentrating on the investment programs emerging through the Interchim agreement, pays relatively little attention to the slowly proceeding interenterprise discussions, while the preparation of the interstate agro-chemical agreement irresistibly moves forward along its path.) Finally, the noteworthy argument that this solution — contrary to the Soviet exchange deal — does not involve Western import substitution is easily counterbalanced by the Western export-increasing effects of production cooperation (balanced deliveries are expected in dollar trade relations), which equally fit into the main objectives of central economic policy.

Although BCW voluntarily puts forward its proposal to establish a cooperation agreement for five to seven years (for which it also gains, allegedly, agreement from a few top officials in the Planning Office and the Ministry of Finance), Elanco nevertheless chooses to employ sharper forms of struggle. Through delayed delivery of equipment and materials, it endangers the existence of the dwarf Olitref plant that constitutes the basis of the other investment variants. (It is put into operation only in 1976 and fails to reach even the lowest output target envisaged.) This is, at least, how the enterprise experts justify the delay on the official form. While lowering the price of the final product, Elanco continues to keep up the prices of intermediates needed for its production. Moreover, it also suggests that in case the exchange business should materialize, it undertakes to buy back only the active ingredient. There are also views that the American concern has in fact no feasible proposal to make; it only wants to find out about its Hungarian competitor's marketing prospects at the negotiations. It is certainly true that BCW is often compelled to grope about in the dark when trying to ascertain the real business intentions of Elanco, and its exposure in this direct business contact is no less than in the socialist cooperation relationship transmitted via the intricate system of its controlling organs. The enterprise comes between the devil and the deep blue sea: not only do its decade-old relations with the Americans slowly loosen, but it also turns out that by applying the above means of competition, they are in a position to make the conditions of the Soviet cooperation virtually untenable.

The choice (or fortuitously a compromise) between the parallel

and therefore independent cooperation proposals mutually impairing each other would, in principle, require a thorough comparative analysis of the respective economic efficiency of the two programs at the enterprise level and at the level of the chemicals and heavy industries and the national economy as a whole. In the absence of such an analysis, and relying merely on a verbal confrontation of arguments, we might easily find that the scales will be tipped, even under deteriorating conditions, in favor of cooperation with the American firm if the internal economic efficiency of the pesticides transaction is taken into account. But the supervisory organ fails to make this comparison (as a result of the breaking off of the negotiations with Elanco, the basic data essential for making a comparison are no longer available) and informs the Hungarian enterprise only in terms of some general statements about the discriminatory problems of trade with the United States and about the actual relevance of CMEA cooperation deals. Thus there is hardly any chance that light will ever be shed on the fact that it was perhaps the American exchange business that would have been the less efficient solution for the enterprise. This is, partly, fortunate for BCW because in the future it can refer to the (theoretical) losses that are sustained even compared to the abortive Western cooperation. At the same time, it might also insist that the alleged external economic efficiency of Olitref exports within the framework of agro-chemicals cooperation should be converted into internal efficiency, in other words, that exporting the product should also be profitable in itself and not only through its countervailing imports.

Earlier we spoke about the enterprise's business policy becoming more circumspect. Now we can add that the fall in the world market price of the product and the delay in commissioning dwarf Olitref also encourage some restraint of the company's high-flying investment ambitions. But what is more important from the point of view of our story is that it is at this time that BCW fully appreciates that the immediate causes of the frustration of the American business are rooted somewhere around the Interchim agreement, and that, consequently, the choice between the two forms of cooperation is largely predetermined. Nor can the enterprise ignore the fact that this measure of its continuous insertion into the system of governmental CMEA commitments would be inconceivable without its also being embedded in direct sectoral control, and this, in turn, without the simultaneously growing institutional power of the ministry. It is, in all probability, this awareness of the assimilation process and of the strange contradiction of "the larger,

the less independent" that helps the enterprise to get over the short period of what might be called "cautious recklessness" and to embark on the path leading to the now already unambiguously negative bargaining.

ACT FOUR

Assimilation and Dissimilation

In the title of our study the word "bargaining" occurs twice with the term "assimilation" inserted between. This is because we would like to indicate thereby that the steeply rising and then declining sections of the routes covered by BCW from the pilot plant (dwarf-Oltref) to its reconstruction with — as we shall see — a very modest expansion compared to the above-mentioned planned development variants are separated from each other primarily by the assimilation of the Budapest Chemical Works, and that the process of negative bargaining can also be conceived as a kind of dissimilation.

So far we have been talking about "embedding," "insertion," and have used the term "assimilation" as a synonym for them without further specification. This term is important to us for two reasons. First, because it suggests that while most of the decisions relating to the fate of the Oltref project are embedded in the ministry's own decision-making domain, something which is more important also takes place: the renaissance of the Ministry of Heavy Industry exerts a general transubstantiating effect on the enterprise initiating the development. Second, because it clearly demonstrates that what is going on is more than a simple incorporation. We are faced here not with a supervisory authority capable of absorbing anything, nor with an enterprise foredoomed to the fate that its entrepreneurial activities be transformed in the spirit of direct sectoral control. Instead, we are witnessing here a process in the course of which these activities, and with them the enterprise itself, are assimilated; but by being assimilated, digested, the enterprise serves as "food" for its "consumer," lending it strength for new assimilation attempts.

What should we understand by the "renaissance of the sectoral ministry"? Since in the greater part of the Hungarian version of this study we try to answer this question, it would be senseless to confine ourselves to an answer given in just a couple of sentences. Since there is no other solution, we must

content ourselves with a brief enumeration.

1. Contrary to common assumptions, it is not the world economic shocks of 1973-74 that awaken the Ministry of Heavy Industry from its "Sleeping Beauty dream." The direct sectoral interventions resulting from these shocks are indicative rather of the steps the ministry takes to complete and legitimize its renewal.

2. At the beginning of the renaissance process, we find the ministry as an institution searching for its place amidst conditions of general legal uncertainty, of reorganization and rationalization, and — at the very start of the 1968 reform — admonished to observe patience. Although it loses its Chemicals Trust, its routine practice of treating things homogeneously does not disappear at once. The pesticides industry as a final-product-manufacturing branch maintaining closer contact with its final consumer, the world market, etc., constituting practically an alien body within the less competitive branch of heavy industry, can hardly be assimilated that the ministry, familiar as it is with the economic regulation of basic materials production, approaches it in its well-tried manner. As a necessarily "one-faced" sector organization, it cannot easily cope now with the task of "two-faced" control. Although it does not divest itself of the alien body, it makes less and less effort to direct the branch in question with self-restraint (and tends to regard what is special also as pathological). First, it tends to respond with instinctive reflexes to day-to-day problems; later, however, with increasing consciousness it already assimilates (see the sectoral concepts of industrial policy) pesticide manufacture as a potential independent undertaking into the institutional system for producing basic chemicals.

3. Thus the assimilation process begins with spill-over effects from the physical methods of central management just slightly affected by the reform. The first symptoms of a latent "infection" can be discovered in the ministry's inherited technical-regulatory interventions which, to assert their natural economic propensities, surround themselves with new organizational methods and transmission procedures, mostly in an informal way, since they are deprived of the usual institutional channels of the system of plan instructions. These are organizational forms which, by creating precedents for one another, gradually become accepted and institutionalized at the same time initial, exceptional, direct interventions. The enterprises are not legally obliged to accept the "advice" transmitted by them, but the physical, targetlike viewpoints expressed in it are usually incorporated in the qualifying

criteria for enterprise management.

Very often the sectoral ministry transmits a central (or centralized) will, sometimes in a reinterpreted form, and the fact of transmission also multiplies the number of new institutional procedures. Without this important point of organizational transmission we would certainly lose sight of three basic characteristics of nascent sectoral guidance: the initial "bashfulness" (adjustment to party and governmental decisions), growing enterprise representation inherent in the ministerial transmission (transfer of measures to eliminate operational disturbances in the reform economy, information monopoly, right to intervene in the allocation of material resources owned by the functional guiding organs, etc.), and as a result, the consolidation of mutuality between the sector and the enterprise (operative sectoral intervention for the purpose of eliminating shortage situations, "regulator dismantling," etc.).

4. While in the foregoing we could characterize the Ministry of Heavy Industry as an increasingly supervisory organ searching for its role, now, in analyzing the period 1974-76, the ministry appears to have found itself as an institution acting as a "host" for enterprises (direct intervention in price regulation, product turnover, and foreign trade; the slightly authoritarian adjustment of medium-term enterprise and governmental plans at ministerial jurying sessions; restoration and filling with functional elements of the supervisory organization of sectoral control over enterprises; tightening of the sectoral licensing system for enterprise investments, etc.). A new kind of direct operative activity of the ministry, the renewal of plan bargaining, and an increasingly elaborate form of sectoral legislation — all these will be indispensable components of the above-mentioned role.

5. The idea of transforming the originally research-oriented pesticide program into a production-development-oriented one and of changing the main direction of research done in a sectoral framework into a central development program (CDP), together with related ideas about trustification, all these originate somewhere in the neighborhood of the Ministry of Heavy Industry and the Chemicals Association. In the course of the preparatory procedure under their guidance, rather unvarnished and extreme reform plans for the reorganization of pharmaceutical, pesticide, and intermediate production are drawn up parallel to the spread, and sometimes even in anticipation, of the efforts to centralize development. This is because the central development program encompassing the three

industries actually exists only in an embryonic state when the medium-level guiding organ for the chemical industry, conceived by the ministry, was given its name in the mid-1970s: Biobtrust.

At the same time, what is hidden behind the objective of development centralization is in fact "sectoralization," and the impregnable role undertaken by the ministry covers a whole host of direct sectoral interventions (specification of the product range and of the responsibility for ensuring supply professional arbitration, etc.).

6. Finally, it is also hardly immaterial that along with the renaissance of sectoral guidance, a theoretical-ideological system supporting the above-outlined assimilation process, further represented in the professional press by top officials of the Ministry of Heavy Industry, comes into being. This is a new type of industrial policy combining in a peculiar way the values of an active reform spirit, a narrow technical modernism, and traditional sectoral lobbying while it regards the sectoral ministry mostly as a concern also performing the task of direct control, as a well-organized and diversified mammoth enterprise.

Let us now briefly investigate how this cumulative accretion of power to the ministry affects the Budapest Chemical Works. It becomes aware — as also shown by the history of the Oilref project — of its being assimilated only rather late. This is likely to be explained by its specific projected state (profitable management, self-financing, maneuvering capability on the boundary of agriculture and heavy industry, the fostering of informal relations to get around the supervisory organ, the special prestige of its managing director with the authorities of economic management, etc.), which first makes it possible for the enterprise to avoid the unfavorable effects of the restructuring of economic management. It is in fact amidst the intricacies of Oilref that BICW begins to realize that the ministry has repeatedly been applying direct interventions in the life of the enterprise since as early as the drawing up of the medium-term plan encompassing the first half of the 1970s (planning jury, relocation in the countryside, "coordination" of developments, assigning the responsibility to ensure supply, forced import substitution, launching of the sectoral research program, etc.), which, when first applied, appeared to be merely annoying.

True, the first interventions affecting the enterprise do not generally have a harmful effect; moreover, the rather uncomfortable decisions made by the ministry, prior to the world market price explosion — on prices, investment, and foreign trade — affected

enterprises other than the Budapest Chemical Works (most of its products fall within the fixed or maximized price category, the overwhelming majority of its investments are in fact replacements, its Eastern export relations are poor, etc.). Also, the sectoral policy measures following the price explosion are not generally in conflict with the direct interests of BCW (subsidizing products which have become uneconomic, import licensing, etc.); yet at the same time, the enterprise management first begins to be seriously worried by realizing for the first time in a long time that it has to rely, to a substantial extent, on the tutelary assistance of its ministry, and that without the benevolent approval of its supervisory organ it has little chance of operating successfully with its functional guiding authorities, even if it feels at ease in the nascent system of multilateral plan bargaining.

BCW's assimilation in its broad sense entails, of course, not only a threat to its original institutional character but also temptations. However aware of the price that it might have to pay in terms of commitments and exposure for yielding to the temptation, the enterprise management must also consider its compulsory force, even if it has to renounce some of the potential advantages voluntarily. Under these conditions it is impossible for an outsider to ascertain exactly when BCW changes the course of its bargaining behavior in the complex jumble of interwoven advantages and disadvantages. It reflects reality more faithfully if we speak — as we did in presenting the "double-faced" Oltref proposal for the enterprise's Fifth Five-Year Plan — rather of a longer awakening period interspersed with ambivalent positions.

But in the light of real actions, two things appear to be verified: (1) the fact that at the turn of the Fourth and Fifth Five-Year Plan periods, the supervisory authority officially drops the outline development project for the large Oltref plant and provides an opportunity for BCW to give expression in its actions to its doubts about socialist cooperation; (2) the ever advancing preparatory work for the central development program and the ministry's unambiguous steps toward reorganization affect BCW in its very existence, and it must consider promptly whether specialization in pesticide production and its behavior as a reform enterprise can be reconciled with each other at all in the long run.

When BCW withdraws from assimilation, it strives hard to mitigate the risks of an action which it regards as more and more uncertain; and it does so in such a way that in the process not only the development in question but also possibly its institutional type

as a whole might preserve its limited entrepreneurial character. Thus the aim is a kind of general dissimulation. Disappointed and full of anxieties, but combining in its final conclusions fatalism and practical reason in a peculiar way, it professes such truths as: "Let the emperor have what is the emperor's"; "You cannot begin everything from the beginning again"; "It's no good staying, and going back, even if it were possible at all, is risky; perhaps it won't be that bad to stay somewhere in between."

Dissimulation — in between. The most important elements of the negative bargaining process may be roughly characterized in this way: (a) noncommittal participation in the development program; (b) a compromised "cartel" proposal in the trust dispute initiated by the enterprise; (c) retreat to somewhere near dwarf-Oltref by withdrawing, partly, from the agrochemicals agreements.

a) Studying the recommendations of the central development program (CDP), we might find it surprising that they include relatively few products made by BCW, that some of the products it also manufactures are included in the program for another firm, and that its share in the investment allocations envisaged over nearly a decade and a half is rather modest. The double-faced character of the enterprise's behavior with respect to the central development manifests itself in its arrangements for leading an "ambiguous way of life." Inside or outside? To join the program or to stay away from it? BCW eventually chooses both at the same time — it "commutes" between them. It would like to reap the benefits of both solutions so that it can simultaneously avoid their drawbacks:

1. to take part in drawing up the CDP (to be present where the decisions are made) and to pursue, with a few products involving little risk, the well-tested method of "picking up" credits whenever possible;
2. to take care lest the future of the enterprise be permanently coupled to the fate of the program, to insist on the possibility of alternative initiatives (emphasizing that BCW produces not only pesticides, and ensuring preference, within the agrochemicals product range, to the development of special chemical fertilizers);
3. not to sacrifice, for the uncertain advantages offered by the CDP, the independent development of the enterprise in the forthcoming one and a half decades, nor to risk, by standing completely aloof, the material supply, research, and foreign trade relations of BCW;
4. to have formulation acknowledged as the enterprise's "prerogative", or at least to prevent the possibility that a competitor

should gain, with central assistance, any advantage over it.

Thus the retreating movements of negative bargaining also entail a withdrawal in economic policy. The Oltref complications, the expected strengthening of competitors consequent upon the results of the program in the production of intermediates and active ingredients stimulate the enterprise, on the one hand, to preserve (more exactly: not to break) its hegemony over the less risky pesticide formulation and, on the other, to search for a new product family that could become a dominant product, but now outside the pesticides industry.

The assessment of the situation by BCW is obviously intertwined with a great many — necessarily uncertain — assumptions, and thus its commuting between two alternatives might easily turn into a tightrope walker's balancing act. The main open question is of course the trust issue. Insofar as the trust (or any form of large integrated enterprise) gains acceptance, all related considerations of BCW will immediately cease to be valid. To stay outside the CDP — if conceivable at all — would be tantamount to BCW undermining its own chances in the distribution of power within the common organization. If, on the other hand, the organizational association should fail to materialize...

b) With the trustification proposal of the ministry, the situation assumes a serious turn: the impending reorganization compels the enterprise management to get over its initial reactions influenced by its "déjà vu" experiences and to meditate on its future.

For if a new chemicals industry trust were really to be established, this would undeniably put the past behavior of BCW into an entirely new light. (The final state of reorganization in the industry will presumably be a so-called "ownership integration," in which it will certainly not be the Budapest Chemical Works that constitutes the most important economic unit; in all probability the leadership of the Chemicals Association will form the central core of the management of the new institution, and thus the formal hierarchy between the enterprise and the association will be reversed; relations with the functional management organs will loosen, etc.) Then the BCW management might brood about the paradoxical situation in which it is precisely the pesticide production activities destined to form an independent undertaking and the specialization built around that that make BCW suitable to be the primary object of an organizational amalgamation. This constitutes a serious danger not only to its entrepreneurial form but also to the maintenance of the very efficiency of production attained so far.

The Budapest Chemical Works is striving not simply to preserve its organizational independence but also its economic foundations (which of the two to prefer is difficult to say). But it is certainly true that if these foundations are weakened, then the remaining sovereignty of the enterprise is also likely to be shattered.

It is evidently this set of questions that might make the executives of BCW doubtful about the arguments of the sectoral organs favoring recentralization. Especially after the ministry, following the first failure of its Biotrust attempt, underpins its organizational reform efforts with arguments based increasingly on professional rationality within the general theoretical framework of the "new industrial policy." The enterprise, noting the antitrust attitude of certain government representatives, and seeing the vulnerable points in the reasoning of its direct superiors, decides to defend its interests in an unusual way, in the limelight of publicity.

When the Biotrust concept is elaborated, BCW's counterproposal is hardly more than the renewal of its earlier "cartel" idea and its dissemination within the state apparatus. Its aim, by suggesting an acceptable (and even desirable) yet moderate form of organizational integration, is to forestall the trust concept and to take the wind out of its sails. Soon the enterprise decides to take a more hazardous step: in 1976 its managing director appears on the stage and makes critical comments in the professional press on an article by the deputy minister in charge of the pesticide industry within the Ministry of Heavy Industry.

The enterprise management, relying on the general principles of economic policy, levels its attack at the following points: (1) the industrial development concept underlying the organizational reform is not well-founded; (2) the relevant productive activities are, by their very nature, not suitable for centralization and amalgamation into large organizations; (3) and where they are nevertheless suitable — as shown by international examples — the organizational concentration is the result of a decades-old integration process taking a variety of forms; (4) finally, the enormous boom in the Hungarian pesticide industry during the recent past is mainly due to relatively independent small and medium-sized enterprise activity.

But the pillars of the ministerial ideas are profoundly shattered by a practical counterproposal by the Budapest Chemical Works rather than by theoretical reservations. It is a new "cartel" plan again which takes a stand for the centralization of certain decisions, but only within the limits of a voluntary association of

enterprises. Its suggestions are as follows:

- centralization of about a third of the enterprises' development sources;
- joint decision on enterprise investments above a certain value limit and on the division of the product range and the market;
- joint performance of scientific controlling (not research!), licensing, and perhaps marketing activities;
- coordination of research activities in compliance with agreed principles, but leaving the enterprises' research departments unchanged.

Obviously the enterprise is also striving to perform an amphibious role from an organizational point of view: to create an institutional form enabling it to be both "within" and "without" simultaneously. But we would not completely characterize the tactics of BCW if we ignored the fact that its management, if only to the extent of an idea, also has an "emergency plan" to cover the hardly absurd case in which the Budapest Chemical Works nonetheless finds itself in a trustlike organization strengthened by a central development program. And this plan is a guide to action, envisaging functions which provide BCW with relative independence even in a strictly centralized industrial organization, and which are too hard for rival enterprises to learn. This "emergency plan" is the following:

To withdraw, if the "cartel" proposal should fail again, from direct production (at least in Budapest) and gradually to transform itself into a vitally important intellectual center for the industry: a research and experimental base primarily in pesticide formulation, on the one hand, and, on the other, into a plant-protection and biological station for the industry somewhere around the boundary between heavy industry and agriculture, enjoying, owing to the amalgamation of these two activities, a monopoly position.

c) By way of conclusion, let us return to our original development story we undertook to tell: what is the new element that negative bargaining introduces in the life of Olitref? We dropped the thread of the plot somewhere around the turn of the two five-year plans, in 1975-76. At that point the Budapest Chemical Works already knows that its ministry will cancel its support for the large Olitref project and definitely maintains that the expansion from its own resources of the dwarf-Olitref project will at best satisfy only domestic (and occasional Western export) demands. Thus the initial conditions for the bargaining are, in principle, given: the sectoral ministry cannot dispense — primarily owing to the at least partial

fulfillment of the Soviet-Hungarian agreement — with the cooperation of the enterprise, but it does not need more than that. And BCW, being "in actual possession," does not let itself be obliged to give up completely the reserves of its development capacity and insists on external resources. Under such conditions an agreement should be concluded in principle, somewhere between the dwarf and the large Olitref projects.

This is, seemingly, what actually happens. Instead of the construction of the new plant with a 6,000 tons per year capacity (large Olitref), the parties agree on the expansion of the pilot plant. The new facility envisaged (4,000 tons of final products per year — let us call it "medium-Olitref"), is far in excess of the performance planned by the virtually self-financing small-Olitref program drawn up as a safety reserve in the Fifth Five-Year Plan of the enterprise. Thus it is equally able to satisfy both Soviet and CMEA (Interchim) demands, but it counts on securing a preferential credit amounting to almost 300 million forints.

As already noted above, the Budapest Chemical Works, as development is dragging on, is compelled to try to salvage what it can. Therefore, disappointed as it is, BCW renounces the idea of developing the product in question into its primary output, but it attempts to squeeze as much as possible out of it. For this purpose medium Olitref might, owing to the reconstruction character of the project, be a suitable and not very hazardous undertaking that can also be fitted into the CDP. In all probability it will be able to take up more credit than what is, because of the hidden reserves, actually needed, not to speak of the advantage that the facility to be built will not disappear even after the discontinuation of Olitref production. All this is of course not worth a great deal if close to two-thirds of the planned output of 4,400 tons per year has to be sold on the necessarily unprofitable CMEA market. Nor does it mean absolute security for the enterprise if it succeeds in agreeing with its sectoral authority on compensation for its deficit.

In the meantime the economic efficiency of Eastern Olitref exports has been deteriorating steadily: during the period 1976-78 the Soviet price offers are already approaching 2,000 rubles per ton. Accordingly the functional management organs insistently demand that exports of the products listed in the interstate agreement be economical not only externally but also individually (internally). In addition, stoppages in counterdeliveries, frequent quality complaints, and protracted price disputes also diminish the responsibility of the Ministry of Heavy Industry for precise fulfillment of

the agrochemicals agreement. Consequently, Oltref begins to lose some of its significance for the ministry, and so the latter's bargaining position vis-à-vis the enterprise is improving. And more than that. The ministry is now in a position — over and above making its general influence felt — to align, in the defense of its case, several direct, "persuasive" instruments it acquires when implementing the development process. (Regulation of the domestic price of Oltref — too high, as also admitted by BCW; stopping of cheap Soviet intermediates; impeding Western imports; abandonment of preferences granted to the high-priority development of the industry, etc.) These amply suffice to torpedo not only the large or medium but even the dwarf Oltref project. Nor does the gradual withdrawal from the large Oltref investment provide any appreciable help to the enterprise in the negotiations.

Hence the Budapest Chemical Works submits its credit application for the medium Oltref project with ambivalent feelings. Simultaneously, it covers itself in all possible directions. It is fully aware that — in view of the consolidation of the bargaining position of the Ministry of Heavy Industry — it can securely extort compensation for its export losses only if it makes the ministry aware that it would be content with only a modest expansion of dwarf-Oltref into a small Oltref, which is virtually useless for purposes of CMEA exports. Thus with medium Oltref it practically makes a sacrifice, in the interests of its supervisory organ, so that fulfillment of the agrochemicals agreement can be ensured. If this tactic were to prove unsuccessful, the credit application formulated — to use the enterprise's parlance — in a "sincere" fashion would appear to be a sufficient guarantee compelling the bank to say a final "no," thereby sparing BCW the awkwardness of resisting the ministry. Even if we cannot say that the enterprise has played for a refusal from the outset, it is certainly true that it exhibits some reservations with respect to its own credit application: it does not deploy the heavy weapons of lobbying and imposes the burden of agitation and propaganda mostly on its superior organ.

Epilogue

The dissimulation attempts of the enterprise that we have illuminated suggest an ambiguous outcome of the basic conflict in the story. For lack of space we cannot give an account of the actual results of these attempts. Anyway, the sequence of events is difficult to follow, incessantly reappraising what has been said about

the industrial branch and the Budapest Chemical Works. (The "temporary" situation prevailing during the period 1977-79 is this: the National Bank rejects the credit application for medium Oltref; BCW and the Ministry of Heavy Industry agree between them on a small-scale (2,000 tons per year) reconstruction of dwarf-Oltref, which at least makes possible limited fulfillment of the Soviet-Hungarian agrochemicals agreement; in return the ministry provides for relative stability in the domestic price of the product, the government accepts the central development program, but the trustification idea is shelved for the time being.)

Hence relieved of collating them by item the initial and final state of our story, and freed from the unpleasant task of dispensing justice, we can now follow with a clear conscience the rules of writing a modern drama. After we have cut the thread of the plot at a certain point in time, we can ask the reader for his cooperation in further developing the "dramatic" situation. Alas, for this cooperation the ancient sayings that the events described in our story might evoke in the reader's mind will, for all their wisdom, provide little assistance: "The mountains are in labor... (and bring forth a ridiculous mouse)"; "Like seeks like"; "Muses fall silent in times of war"; "Another victory like that and we're lost"; "How are the mighty fallen."