

On the Organizational Potential for Increasing Labor Productivity (According to the Findings of a Participant Observation)



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Abstract. The article investigates possible ways to increase labor productivity at large industrial enterprises with the help of organizational factors. Factors that reduce productivity include inefficient use of working time, excess of engineering and management staff, inefficient design and technological solutions, procedural violations, accidents and related manufacturing defects. These phenomena are due to uncoordinated work of factory management services, distorting internal factory reporting and losing the ability to adequately analyze the technological and economic situation at the place of production. This problem arose in Soviet times when factory services became functionally subordinate to various government departments that did not ensure consistency of the policy documents they issued. Today, this problem has disappeared, but the working methods of factory services have not changed. The country has no management schools capable of organizing the work of factory services properly. Foreign experience of effective management is inadequate to the situation prevailing in Russian industrial production. Uncoordinated work of factory services forces the leadership of enterprises to manage production in a manual mode. Thus, production is going on, but it becomes fraught with chronic disorganization, which reduces efficiency and productivity. These phenomena, despite their widespread occurrence, are given very little attention in the Russian scientific literature, since there are not enough primary descriptions of situations that arise directly in the workshops. Due to the ineffectiveness of other research methods, this work uses participant observation technique, when the observer is a direct participant in the production

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process in question. An auxiliary shop is a short-range observation area, and the main metalworking shops represent a remote observation area. In the auxiliary shop, labor standards significantly exceed the actual labor intensity. This creates a specific moral atmosphere. The number of standard hours for a specific order is determined by administrative bargaining between management levels. In the main shops, standards are technologically determined, so workers do not have reserves for labor intensification. The increase in standards leads to an extension of the working week by almost half against the one provided for by the Labor Code, which in the future may create social tension. The article describes an attempt to create an independent trade union. The administration was able to block this attempt, but the possibility of forming a trade union remains. In conclusion we point out that the enterprise, which is the object of observation, has significant reserves for increasing labor productivity, but at the same time there is social tension that can lead to acute social conflicts. Improving the quality of management, including load balancing, can make significant contribution to resolving these issues.

Key words: labor productivity, management quality, working week, labor shortage, labor standards, labor intensity, administrative bargaining, trade union.

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Introduction

Structural changes of the Russian economy associated with the special military operation and foreign economic sanctions has led to the emergence of labor shortages and, consequently, to the need to increase labor productivity¹ (Belousov et al., 2024; Kuvalin et al., 2024).

The main means of solving this problem is the manufacturing automation (reducing the share of manual operations). It is necessary to note organizational factors, which include the efficiency of production management without denying the paramount importance of this direction.

The problem of effective organization is in the focus of extensive Russian (Vodyankin, 2021; Kolesnikov et al., 2015) and foreign (Womack, Jones, 2019; George, 2018; Maurer, 2012) literature. Many works on this topic are characterized by a high professional level, they have become world

bestsellers. Russian production managers are well acquainted with such works and strive to apply their results in practice.

However, these works do not take into account the specifics of the situation at large Russian industrial enterprises. From our point of view, these problems arose in the Soviet period and are still relevant. Their essence consists in the discoordination of the activities of factory management services, the work of which is idle; as a result, the management of the enterprise carries out its functions in manual mode. Control over the situation at production is largely lost, which is evidenced by the results of our study.

The reasons for the discoordination of the work of plant services are related to the specifics of their work in the Soviet era. De facto, these services had double subordination: to the management of the enterprise and to the corresponding functional departments. For example, the finance department was functionally subordinated to the Ministry of

¹ Grammatchikov A. (2023). There is no shortage and there won't be. *Ekspert*, 3, 12–14.

Finance, the labor and wages department to the State Committee for Labor, the supply department to the State Committee for Supplies, etc. In the 1920s, there was even an attempt to officially subordinate these services to advisory departments (it was called “functionalka” in the language of that era), but this practice was quickly abandoned because the discoordination got out of control and paralyzed the enterprises’ activity (Abalkin et al., 2007). Nevertheless, de facto “functionalka” remained in the form of double subordination until the end of the Soviet economic system.

Functional departments provided plant services with uncoordinated instructions and control indicators, which often stumped plant managers. The solution was found in the distortion of planning and reporting indicators, which was called “fake” in factory slang. These distortions could not even be called attributions, since their purpose was not to gain personal profit, but to correlate statistical indicators that could not otherwise be related to each other.

In post-Soviet times, “functionalka” disappeared, but new motives for distorting reporting appeared, primarily related to the “optimization” of taxation. As E.A. Antonova puts it, “for completely different reasons people organized exactly the same thing” (Antonova, 1990).

In Soviet times, the problem of discoordination of the work of factory services was not timely realized, but in the 1980s economists and sociologists came closer to understanding it. The furthest in this direction was E.A. Antonova, an employee of the Far Eastern branch of the Labor Research Institute (Antonova, 1990). V.N. Korsetov, a worker (later shop manager) at the Angstrom plant in Zelenograd, came to virtually the same conclusions (Korsetov, 1990). The journalist A. Levikov described an attempt to eliminate the discoordination of factory services at the Kaluga Turbine Plant (Levikov, 1982). The economist A. Skripov reflected the consequences of manual

management of production in his article “Turnover” (Skripov, 1987). According to the words of E.A. Antonova, “people were engaged in active search”.

Unfortunately, management schools based on the results of these works did not have time to form. In the post-Soviet period, their achievements were lost. Today, directors of large industrial enterprises again face the problem of lack of adequate management schools. As V.N. Korsetov puts it, “such schools are absent at all”.

The works published in Russia on the organization of effective production management do not take into account these features. Foreign and, unfortunately, Russian authors do not see that plant management services produce a statistical fiction, and the management of enterprises, therefore, has to perform its functions in manual mode, which is criticized in all works on this topic.

Manual management mode introduces a certain disorganization into the production process. It does not stop or destroy production, but it causes some chaos, which has numerous negative manifestations. Among them we can name inefficient use of working time, unhealthy moral atmosphere, excessive engineering and management apparatus, inefficient design and technological solutions, violations of technology, overtime and associated production defects. At the same time, under manual management some production units work with unacceptable overload, leading to premature wear of equipment and chronic overtime work. The latter increase staff turnover, create social tensions and potentially lead to acute labor conflicts.

State statistics do not allow adequately assessing the production management quality. At this stage, it is even difficult to understand on what measurements such assessments should be based. Statistical data on the dynamics of labor productivity and cross-country comparisons, at least, are associated with obvious methodological difficulties and require a separate analysis. In addition, such studies may lead to incorrect conclusions by

highlighting the problem of technical efficiency of equipment and not taking into account the losses associated with in-plant disorganization.

Methodology

The obvious difficulties of macroeconomic analysis make microeconomic research aimed at studying the consequences of inefficient management at the intrafactory level relevant. These consequences, despite their widespread use, are hardly described and systematized. In modern management science, there is an acute shortage of realistic *primary descriptions* of production situations.

Due to the ineffectiveness of other research methods, this paper uses the method of participant observation, when the observer is a direct participant in the production process under consideration.

The participant observation is one of the types of monographic research aimed at studying single or highly specialized objects. In Russia, V. Olshanskii (Olshanskii, 1995) and A. Alekseev (Alekseev, 2003) used this method. Close in genre were production interviews by S. Belanovskiy, whose respondents can be regarded as included observers (Belanovskiy, 2004). Currently, the research using this method was conducted by O. Pinchuk (Pinchuk, 2021).

In our study, the observer is a worker-sociologist² of a machine-building plant who wished to remain anonymous. The observation object is a large machine-building enterprise in Yekaterinburg. The time of recording the observation results is the period from November to December 2023.

The brief research results are as follows. The control over the use of working time is often ineffective in multi-nomenclature productions. The

working time losses can reach significant values in them. The main reason is the poor quality of factory services and the lack of management schools capable of organizing the work of such productions.

At the production facilities where labor standards are strictly tied to technology, the main reserve for increasing productivity is the lengthening of the working week, reaching significant values, which potentially increases social tension. At the same time, judging by the description, even in this production there is a possibility to increase efficiency due to organizational factors.

Observation results

The description of the findings of the participant observation presents a certain stylistic difficulty. The functional style of a scientific article requires an “objective” description. However, the description of the observation results in impersonal form implies the use of complex grammatical constructions that complicate reading comprehension. Therefore, based on the reader’s interests, the first-person narrative will be retained in the description of observations where appropriate.

Auxiliary shop

Production characteristics. The workshop specializes in plastic products. The main equipment is thermoplastic automatic machines of Japanese manufacture, purchased back in the Soviet times. There is also equipment for plastic processing by cutting, sheet cutting and hair dryers for plastic welding.

There are about 50 people working in the shop. Of them, there are 8 at the Supervisor’s section. The specialization of the section is manufacturing of products according to the orders of the workshops, repair works, welding of plastics. The examples are production of protective screens for machine tools or containers for warehouses.

A typical worker’s salary is 60–80 thousand rubles a month, some skilled specialists have about 100 thousand rubles. The salary of a site manager is 100 thousand rubles.

² The movement of worker-sociologists was founded by a professional sociologist, Candidate of Sciences (Philosophy) A. Alekseev, who in the mid-1980s quit his job at a scientific institution and got a job as a worker at a machine-building plant, where he worked for 5 years. Currently, this tradition is maintained by the informal research group “Sisyphus of Labor”.

The work week is 40 hours, generally adhered to.

The labor load in the shop is minimal, about 10% of normal. People are serving their work time. Some are reading a book or tablet.

Orders come in from time to time. There is an unspoken agreement that the site manager does not “torture” people. They do the work, stretching it out over a certain period of time. One worker does one operation, the second does another, etc.

There may not be enough tools for a full load. Of the eight hair dryers, five or six are usually working, the rest are being repaired. Hair dryers burn out very quickly, new ones are not purchased, so there is an unspoken agreement to work with breaks to cool down the dryer.

A few years ago, the Observer placed a young worker in a neighboring thermoplastic machine shop. After two months, the worker asked to be transferred to the Supervisor’s station. When asked what happened, he replied: “I came there two months ago, and since then I have done nothing at all. I just sit at my desk, reading a book. For example, they start up a thermoplastic plant for 200 plugs, remove the flaking (excess material) from them, and the monthly norm is done. They just sit and get glued to their tablets”.

Many people in the shop leave for various reasons and do not go to work. These hours can then be worked four hours a day, i.e. stay in the shop after work and do nothing at all. If there is some control and some work during the day, there is none after the working day.

But there are emergencies that come from the very top. Here everyone realizes that things have to be done quickly. The work goes ten times faster.

Three years ago, there was a change of management at the plant. They tried to increase the workload. Something shifted a little. This made people angry, as they were no longer free to work 90% of the time, but only 80%.

But people realize that by and large they are doing nothing. Everyone knows perfectly well that

a month’s work can be done in three days. But everyone also knows that if you do it quickly, it will not affect your pay or working conditions, it will just give you extra work.

Labor rationing. Labor is standardized in standard hours. For each order, the technologist makes an operation map of the process. The standardizer puts a certain number of standard hours. These standard hours are used to make up the monthly output, which must be in accordance with the plan.

The number of standard hours, which is put on the order, is arbitrary and, as a rule, overestimated by dozens of times. Let us say an order comes in for the manufacture of a bathtub. They put two hundred hours on it, although it can actually be made in eight.

The number of standard hours is set by bargaining. Let us say an order comes to a site. The site needs to fulfill the plan, so the supervisor may not agree with the number of standard hours, demanding an increase. Bargaining begins. Everyone knows that the norms are excessive, but the haggling still takes place.

The intensity of bargaining depends on a person. There is a worker who is constantly making scandals. He goes to the technologists and says: you gave me 10 hours for this cutting, but I need 15. They tell him that this is absurd, he can’t demand it, etc. But he usually gets what he wants.

However, you cannot arbitrarily inflate the standard hours because they are paid by the shop that gives the order. The accounting department of that shop may disagree. The standard hour costs approximately one thousand eight hundred rubles. The accountant has a limit of expenses, in which he must fit, so he reduces the labor intensity. But the repair shop must also provide itself with a planned number of standard-hours. He puts on the product 30 hours, but the accountant does not give more than 15. Again, there is haggling. All this happens chaotically and arbitrarily.

A lot depends on the shop-customer. There are “rich” shops whose representatives, for example, come and say: we need to make protective housings for the machine urgently, and we will give you more hours, as long as you do it on time. Such an order is signed by the site manager without looking. If the shop is poorer, it is clear that for him standard hours cannot be greatly inflated. Sometimes they put the real labor intensity.

The new management began trying to bring standard hours and real labor intensity into line. Of course, this was opposed at all levels. The planned number of standard hours for the shop was doubled. Partly the workload increased, but only slightly. At the same time, there was “inflation”: more standard hours were put on orders. At the Observer’s site, the plan used to be a thousand standard hours, but now it is more than two.

Italian strike. The shop is staffed mainly by people of pre-retirement age. It is a very monolithic team, there is no personnel renewal.

Pensioners present themselves in such a way that they can go to the head of the shop and make a scandal, they can scandalously go through all the offices, if they suddenly find out that they were charged something wrong or it seemed to them so.

There is one worker who cuts the material. He’s created a unique environment for himself. He discourages attempts to load him with work. They give him an order for cutting, he doesn’t do it. After that, the workpieces are supposed to be welded. The order doesn’t come in. I call the shop manager and ask where is my order? The supervisor says: “We don’t go to him, go and find out”. Our workers find out about it and start to resent him for not doing anything, and they have to do it for him. I tell the boss that we won’t do it either.

After a while, the shop manager comes in and bashfully says: “Look, he doesn’t want to do it, you do it”. I ask: “Why should I do it for him?” He says, “You know him, we can’t do anything with him.” The situation hangs.

A month later they call from the shop that ordered the boxes, asking where the order is? I said, call the boss. The boss calls the planning and operating bureau (POB). POB calls me... Then everyone goes to that worker, persuades him, and he starts making them.

At the site where I work now, there used to be a man named Borisych. He used to go on a bender for 2–3 days every 2–3 weeks. He was connected to the shop management by some kind of acquaintance, and they forgave him everything. He could just disappear from work for a week without even notifying them and disconnecting his phone.

He knew production very well, and even better how to behave with his superiors. When orders were brought to him, he could refuse to take them without explanation. He drank with the workers, went on binges with them, and then deprived them of their bonuses. At some point he just stopped coming to work. The bosses’ patience ran out, and he was dismissed at his own request.

When I came to the site, the amount of work increased. It happened under pressure from the plant management, but people thought it was because of my arrival. They started to grumble a lot. They said that this had never happened under Borisych, that Borisych didn’t take many jobs, just shunted away those who brought them. They were afraid of him. And you, they told me, take all the jobs.

In our shop, everyone tries not to deviate from their position even a millimeter. If you, roughly speaking, unconditionally take all orders and do them normally, it doesn’t mean that your position will improve. It is on the contrary, on you will be dumped everything that others refused, so it is customary to refuse and scandalize.

Checks and balances. There are a huge number of unspoken rules that make up the essence of industrial relations on the shop floor. There is a system of indulgences that is impossible in any other production. Nowhere else is it possible to behave

in such a way with your superiors, to sabotage your work, to leave work and “work it off” as it is possible here. Nowhere else will they turn a blind eye to this.

But sometimes there are people who have the nerve to demand something extra, violating informal boundaries. Then a scandal breaks out. The shop manager threatens to deprive them of the opportunity to take time off work. In such a way, the issue returns to normal.

These checks and balances and unspoken rules are the basis for everything. And surprisingly everything functions. It means that there is a rather peculiar system of relations.

Workers and shop floor managers have common interests. For example, there was a campaign to abolish additional leave for hazardous work. They started to recertify workplaces. On this occasion, the shop manager calls me and says: now they will come to measure the air, so you must urgently create gas pollution, burn something, pour acetone, melt plastic, etc. I go to the guys, they set something on fire, everything is smoking, the stench is standing. They come and measure it. Everything is fine, we saved the harmfulness for another year.

People on the shop floor are very dependent. On the one hand, there is a system of indulgences, but on the other hand, people are on the hook psychologically and emotionally. The question immediately arises in their minds: “Where else will I be allowed to do this?”. The bosses are also well aware of this and try to play on it.

If there had been harsher exploitation on the shop floor, there might have been harsher opposition. There would have been more moral right to protest. But now a worker can be told: you stayed at home for three days, then “worked out”, and now you decided to fight for something?

Engineers’ illiteracy. The tasks that come from engineers are 95% illiterate. Most engineers don’t understand the drawings or the work. When an operating chart comes to the engineer, he allocates standard hours according to a template, and that’s it.

If a worker finds something wrong in a drawing, he can go to the technical bureau, find the female technologist in charge of the order, and scandalize her in front of everyone. He screams, then with the same drawings goes to scandalize the boss. He can just throw them on the floor and say that he will not work with it. Engineers are very afraid of such scandals.

Objectively, there is only one person in our technical bureau, a young guy who knows how to work. He is really a true engineer, he has a specialized education. He is literally the only one who keeps the shop going. The rest are people who accidentally “knocked up” at the plant, more often women. They can only throw up their hands. They mostly carry papers around the plant, i.e. they participate in the work of a gigantic bureaucratic machine.

The problem is that if they leave the company, their skills are unlikely to be useful anywhere else. They have purely bureaucratic knowledge of acquaintances and connections. If some issue arises, they know where to call, who to get a signature from, etc. It’s a very convoluted bureaucratic system. It involves a lot of people. Their function is to swim among these endless documents. And very few people know how technological tasks are solved.

The technological level has fallen dramatically throughout the plant. I judge by the way orders come to us from other workshops. Engineers bring in an order. Often their assignments, which they put into sketches, are simply illiterate. They try to sketch something approximate on a piece of paper, and they tell us: you do it. And once it gets to the worker, he reasonably says that even the thickness of the product is not specified.

If a worker is brought an illiterate task, he may not take it. And he has every reason to do so. But there is an informal rule: relations should not be aggravated. If possible, the order is fulfilled, even though it is illiterate. There is a very complex, hard-to-explain consensus in all this.

The workers have a good understanding of technology. Sometimes they find something on the Internet, come to me and say: “This is what we need to buy, apply for it. In theory, this should be done by an engineer. But this engineer is an illiterate girl who doesn’t understand anything at all. She doesn’t even know how the machine works and what kind of application should be submitted. But if you go to her and tell her, she will listen to you. So, I tell her: submit such an application. She does it.

When I worked in the technical bureau, I was convinced of the amazing arrogance of engineers toward workers: we are people with higher education, we know what is right. But in fact, they don’t. They rarely come down to the shop floor for concrete solutions.

It gets to a funny point: an engineer comes to our workshop and asks us to help him write an operational process. The workers in my section snicker and say, “Why should we help you? But then they explain: we do it like this, but we can’t describe it from the engineer’s point of view.

Comparison to a small business. A small business owner cannot afford the kind of things that take place in our shop. I worked at a small pilot production facility. There was only one technologist there, and he used to walk around the shop with us in a turtleneck and solve questions. All the documentation was kept by one person. The owner personally supervised production and understood the technology.

Main shops

Equipment. The predominant equipment is CNC machines, the latest ones, European-made. The fleet is regularly updated. Interestingly, these machines are still connected to the manufacturers despite the sanctions. Manufacturers can see how they work.

New machine tools from Europe continue arriving. They obviously come through Kazakhstan, but it has become more difficult with this. Some machine tools have stopped being delivered.

Some spare parts have also stopped arriving. However, in general, there are no disruptions in the work.

The auxiliary areas have old semi-automatic Soviet machines, not even with CNC, but with manual control.

There are Chinese machines, but not many. Chinese analogs are five times cheaper than European ones. However, there is no tendency to increase supplies from China due to sanctions. Chinese equipment is worse in operation and in terms of working time. It is inferior in all parameters. And its commissioning is much more complicated. Our plant has never ordered cheap equipment, it has always taken the most expensive equipment.

Salary and labor schedule. Standard salary of turners on CNC machines is 150 thousand rubles, on old Soviet machines, it is about 120. Payment is piecework.

There are closed workshops where you need special authorization, and not everyone can get into them even inside the factory. There are huge machines there, not even machines, but entire complexes. In these shops, wages can reach up to two hundred thousand.

High earnings are achieved through significant overtime. Turners work 6 days a week for 12 hours. Some work 7 days a week without a day off. This is allowed. The overtime is voluntary, it is perceived as a blessing. But not everyone can withstand such a load. Some quit or move to other areas.

Despite overwork, there are not enough people in the workshops. Some machines are idle. There is a high turnover of personnel.

Labor rationing. Compared to the repair shop in the main shops, rationing is much stricter. This is due to technological reasons. If the machine is fully loaded, the worker has few reserves to increase output. The machinist takes out the finished part, puts a billet and watches how it is turned. It doesn’t have to be a CNC machine; it can be an automated machine or even a manual machine.

In many industries, workers hide their reserves so that they do not increase the norm. F. Taylor, the creator of the school of scientific management, called this phenomenon “deliberately low employee productivity” (Taylor, 1991). But, since the machine tools at our plant are automated, it is difficult to say whether they have such reserves. Nevertheless, the work of machine operators cannot be called easy. They are on their feet for 12 or even 14 hours a day.

The enterprise’s policy with regard to workers’ wages is contradictory. On the one hand, the norms are periodically revised upwards. In the absence of reserves, this forces workers to take additional overtime. The plan is fulfilled by lengthening the working week.

On the other hand, growing turnover and staff shortages are forcing the administration to increase wages. In the spring of 2023, the indexation of the basic part of wages was carried out throughout the enterprise by about 10%. But it was done chaotically and unfairly. Someone was raised by 10, someone by 15, someone even by 20%. Nobody understands what it depended on.

In part, these differences may have been due to the importance of the workshop. But also within the workshops, when people went to sign documents, they were very surprised why one had 10% and the other 15%. They do the same work, but they were promoted differently. The management tries to make it impossible for a worker to understand how the planning bureau and the payroll bureau work. The workers, on the contrary, try to find out in every possible way.

Cronyism in the main shops. There are certain workers (“cronies”) who are employed under a special arrangement with the management. They get very good, favorable parts. For example, they put the part in the machine and wait, and get good output and good pay. Ordinary workers, on the contrary, are given “inconvenient” parts, have to run from machine to machine, and their wages are much lower.

“Cronies” “snitch” to the management. About who has been drinking, who went to bed on the night shift and loaded a detail. It used to be possible to sleep all night, but now the information goes straight to the bosses.

A lot depends on the management, how they like you. It is difficult for a newcomer to get a good job. He will work for a newcomer for a few years until he gets used to it and finds a better place.

An attempt to create a trade union

In the old days, the company had quite a few social benefits, in particular an additional 7 days to vacation for harmfulness. This did not apply to everyone, but many people had this benefit. There was a 13th salary, people were very much looking forward to it. Those who had school-age children were given a paid day off on September 1.

About two years ago, those benefits began to be taken away. They canceled the 13th salary, the day off for September 1. People grumbled, but there were no protests. But at some point, the plant management decided to take away days of vacation for hazardous work. There was a protest about it.

They started canceling them quietly. They organized re-certification of workplaces. They went around the shops with a paper that said that the hazardousness category of a given workplace had been revoked. People signed it without understanding. They went around about a third of the plant, but then the workers understood and became indignant.

For many years now, people have been standing at the plant’s entrance gate handing out newspapers with calls for various actions, such as strikes. These people are not workers of the plant, but representatives of some political organization. It is interesting that nobody has dispersed them so far.

The newspaper is called “Rabochaya Demokratia”. It sometimes reached our workshops, but nobody read it. It’s not clear who it was aimed at.

These people found out about the workers' discontent and started handing out leaflets with a call to oppose it. They collected about three hundred signatures. Several dozen people came to these people for a meeting. They provided them with lawyers and told them that the administration was acting illegally, don't sign anything, go to your management and demand that the recertification of jobs be canceled.

This caused management to panic. They immediately announced that the extra days would return.

After that, the people who were indignant felt their strength and organized the backbone of an independent trade union inside the plant. Several people from our shop, including our electrician, joined the union. In particular, our electrician. He started actively approaching the other workers and agitating.

The activists went around the shops at lunchtime, gathering people, organizing rallies, talking about their victory and that their next goal was to get premises for the union, and also to fire the head of the official union that collects dues.

The initiators of the independent union made a big mistake when they opened their names to the management and went openly to the shops. Many people told them that it was better not to do that, but they were intoxicated with victory.

After a while, activists were called one by one to the security service. They were asked what they lacked. They collected dossiers on everyone, found out who had loans, problems with the law, labor discipline violations. They found an approach to everyone.

Our electrician was told: "You don't have extra vacation days, why are you doing this?" And he thought he could solve his own problems at the same time because they gave him a free lawyer.

Formally, the union continues existing. There is a chat room, but after such consequences nobody supports these people. The union was decapitated by the skillful actions of the management, and the

union members themselves had no experience of confrontation. When they were hit back, they were confused.

Nevertheless, they have achieved a lot, considering that there was nothing like this before. Almost every shop had someone in it. These people are still working, no one has been fired. However, the victory was short-lived. The abolition of extra days stopped for a year. Now the management of the enterprise has started to recertify again, taking into account past mistakes.

The problem is also the illiteracy of those who stood outside with newspapers. They did not explain to the activists what might be waiting for them, they were happy to get the news that a union had been formed. Now, of course, none of the workers trust them.

People have no experience of confronting the administration even in case of successful unionization. The potential for this exists, and now it is greater than before because there is an objective shortage of personnel in production. There are prerequisites for "swinging rights". With a skillful approach, it could bear fruit.

Naivety is related to the fact that people perceive the creation of a trade union as an absolutely legal matter. They think that what we are doing, creating a trade union, it is legal. They do not yet realize that the management can do anything to them. To be more precise, they do understand, but they believe in what is written in the law.

Many people live in hostels, they can be evicted at any time without explanation. You will have to rent accommodation, but not everyone can afford it. Some people have a comfortable niche at work where they can take it easy and turn a blind eye to it. He is exploited not 100%, although he can, but only 50%. Once the bosses have the list in their hands, they know how to approach and intimidate.

For some people, one conversation in the sidelines will be enough. And if someone sticks his neck out, everyone knows what can happen to him, up to and including some extreme measures.

Another thing to consider is that people are very tired at work. They only have time to drive home, sleep and then go back to work. They have no energy to create trade union structures.

Still, I think that there is ground to create a trade union because objectively there is a shortage of people, there is no one to work. With a skillful approach, it is possible to wrestle rights and put pressure on one's bosses. There is a niche where you can bargain.

At the present moment, the plant's staff is rejuvenating. Turners are young guys; people are more active. Now they prefer to work 7 days a week and get their 150 thousand. This seems to be good for today, but it is not clear whether it is possible to live like this forever.

The bosses have their own difficulties. It is unprofitable for them when people start quitting. The personnel department makes sure that a person who comes to the plant does not quit. A new employee is given a bank card, they are trained, they go through all the formalities. If someone starts quitting, it is a disadvantage in the work.

I am not sure the people who formed the union would be able to make rational demands right away. That they demanded a room may be right, but it is ridiculous. That should have been the last item on their list of demands. Gradually, they will figure it out, but it will take time.

In my opinion, the main demands should have been to reduce norms and increase rates in the main shops. People, striving to earn more, are actually going to double the working week. But they are not allowed earning much. The rates are reduced in such a way that at double workload they are paid 150 thousand rubles per month. This is considered to be a normal market salary. And so far, people have accepted it.

But if the rates are doubled and at the same time the processing is restricted, i.e. if we return to a 40-hour working week, the enterprise will face two problems. First, the cost of production will increase.

Taking into account that the main customer is the state, the issue may become political. Second, the number of workers would have to be doubled, but they are not available and it is not clear where to find them. For these reasons, the confrontation, if it arises, may become very tough.

Analytical generalization

Comparison with the Soviet era

Opportunities for comparison. Comparison with the Soviet era is complicated by the small number of studies devoted to labor relations. There were such studies, but they mostly repeated the work of V. Yadov³ and E. Antosenkov (Antosenkov, Mishchenko, 1971) in terms of studying labor satisfaction and causes of labor turnover. The main tool was a quantitative questionnaire, the cognitive potential of which was quickly exhausted.

In the 1980s, the main problems of Soviet production were its chronic inefficiency and low labor productivity. The main reason for this was seen in poor planning, irregularity of logistics and the resulting irregularity of production.

It was believed that in the transition to the market economy these problems would disappear. Today, we can say that expectations were only partially met.

It is difficult to compare the current situation with the Soviet one because of the small number of descriptions made then and now. The range of issues addressed in them coincides only partially, while it is difficult to compare informalized descriptions in general. Nevertheless, the results of our included observation can be compared with those of the Soviet Union in at least three aspects.

Utilization of working time. The worker-sociologist V.N. Korsetov, who carried out an included observation at the Angstrom production association producing electronic chips, speaks about his workload in a published interview in the following way (Korsetov, 1990).

³ Yadov V.A. (Ed.). (1967). *Human and Their Work*. Moscow: Mysl'. P. 392.

• *The last 10 days of each quarter are mandatory. There are more shifts at the end of each month, but they are less intensive. As a result, in terms of the total number of days, overtime takes up about two months of the year. The whole-day (or almost whole-day) downtime takes about the same amount. The rest of the time can be conditionally called a normal mode. This rest of the time, in general, is lightly loaded. There are fluctuations here, too, but usually at this time we do only the norm, which means that even with not very intensive work, about 30% of the shift duration is downtime.*

In the description of our included observation, quarterly and monthly irregularity in the main shops is absent. It is possible that this problem has now disappeared, although the issue needs to be studied. On the other hand, the description of V.N. Korsetov shows incomplete loading, which is not as significant as in the repair shop of our observation object, but less than in the main shops described by the Observer.

V.N. Korsetov's expression "we do only the norm", which means that the norm includes 30 percent downtime. Consequently, both then and now, at least at some production facilities, the norms did not reflect the technological capabilities of the equipment, but were adjusted to the actual output based on underutilization.

Recycling. In this aspect one can see a significant difference between modernity and the Soviet era. What is common is that both then and now rework was substantial. However, judging by our included observation, recycling has become much greater in the main shops today.

During Soviet times, labor laws regarding workers were generally respected. The 8-hour working day was observed. It is true that weekend work organized by the management of enterprises for the sake of meeting the plan was a common phenomenon. However, it was paid as overtime.

In some cases, workers, taking advantage of the shortage of labor resources, could dictate their own terms (Korsetov, 1990).

• *The administration will undoubtedly be forced to organize work on weekends, but on what terms they will be organized – this will be dictated by us. How it will be organized at our site, I can say for sure. It will be not only double pay, but also time off from work. If they don't want to, we won't go.*

The specificity of the Soviet era was that starting from a certain level of salary people did not know what to spend it on. In the 1970s and 1980s, wages were financed by inflation, which was not kept up by commodity coverage. The bulk of this financing went to workers in material production. The wages of other categories of personnel (ITR and clerks), as well as workers in other industries, lagged far behind. For this reason, the value of high wages for Soviet workers may have declined. In Soviet times, they perceived overwork as an extra burden that they had to bear under the pressure of the administration, whereas today, according to our observation, the value of wages is very high, so overwork is perceived as a benefit.

• *No one wants to work at the mine on weekends. Double pay, you can earn 30 rubles a day, and there are no willing workers. "Communists, go ahead." Somebody was persuaded. Someone is on the waiting list for an apartment, someone has a child on the waiting list for kindergarten. We recruited a shift (interview, mining foreman of a coal mine, 1982).*

Engineers' labor. The Observer talks a lot about the incompetence of engineers. His description allows making a tentative conclusion that nothing has changed in this aspect. In Soviet times, complaints about the unqualified work of factory engineers were heard very often. This was most vividly expressed in the production diaries of

A.N. Alekseev (Alekseev, 2003). His work consisted in making holes in workpieces according to specified coordinates. For this purpose, he received three documents: a drawing, a technological card and a matrix. Having found a discrepancy between the map and the matrix, he scandalously achieved its elimination.

- *Getting to work, I looked at the drawing, and it's a good thing I did because it didn't match the map or the matrix.*

The quality of the elaboration of technological processes, according to Alexeyev, was as follows:

- *Technologists are frankly betting that the worker will get out of it somehow.*

V. Igrunov, a dissident of the Soviet era, who by the will of fate found himself in the position of a factory supply clerk, reports the following (Igrunov, 1990):

- *And then there is the massive incompetence. It is difficult for me to communicate with such people and bosses. I constantly have to prove the obvious, and it takes a lot of nerves, time and effort.*

Typology of production facilities

The situation in the auxiliary and main shops represents opposite ideal types, presumably widespread in the economy.

An auxiliary shop situation can arise under two conditions. First, the production should be out of the focus of attention of the management. For our case, this is logical: a shop with 50 employees cannot be a priority object of attention for the management of a ten-thousand-strong plant. Taking into account that the shop fulfills its production functions, the costs associated with its inefficient operation are so small on the scale of the plant that they can be neglected.

The second condition for the emergence of the specific system of relations described by the Observer is the multinomenclature of production.

The greater the share of individual works and orders, the more difficult it is to plan production and the more opportunities arise for “bargaining” over labor intensity and deadlines. In the absence of reliable information about the real production capacity of production, the norms can be significantly detached from the technology, which is reflected in the results of observation. A similar situation may arise in large multinomial productions, for example, in the ship repair industry (Antonova, 1990).

As for the situation in the main workshops, it is described by the Observer in insufficient detail. It is not clear to what extent it corresponds to the ideal type of strict technological conditioning of labor norms. The report of “being able to sleep on the job” may indicate that a forced extension of the working week may coexist with underutilization of working time.

It remains unclear whether there is a possibility of meeting labor norms by violating technology. V.N. Korsetov reports about it in relation to the Soviet era (Korsetov, 1990):

- *On extra Saturdays, workers will try to get as much done as possible, resulting in gross disruptions in technology and lower product quality.*
- *I'm working on an operation right now that is very sensitive to contamination. So, I call the technologist and show him that there is dirt coming in, and you can see specks of dirt with the naked eye. And the technologist looks and says: “Ah, skip it quickly. During the rush, not only the workers, but also the engineering staff do not care anymore: the main thing is to hand over the plates and report back.*

Management issues

One of the problems of the late Soviet economy was that no schools of management of large enterprises were formed (Korsetov, 1990):

- *I believe that it is possible in principle to create an adequate (for our conditions) payment*

system. But for this purpose, it is necessary that specialists in production management should be engaged in the creation of this system. Such specialists are completely absent.

E.A. Antonova, who worked in the ship repair industry, considers the decomposition of in-plant management as the main reason for the decrease in production efficiency (Antonova, 1990).

- *The tragedy of a director appointed to a collapsed enterprise is that he does not know how to set up the work properly.*
- *Even with the worst planning on the part of the higher authority, about 80% of the mess can be eliminated on a purely in-plant level.*

P. Drucker, a specialist in scientific management, wrote that management is an alternative to tyranny (Drucker, 2015). The lack of adequate management leads to “tyranny”, i.e. to the idea of management by the method of rigid administration (“powerful hand”).

Below are fragments of an observation, which were not included in the main text due to the element of subjectivism they contain, but which allow us to hypothesize about the “tragedy of the director” who resorts to the “strong hand” due to the lack of alternative managerial ideas. The observer reports:

- *After the start of the SMO, we had a change of management. This had a bad effect on production. Of course, it has not collapsed, but some chaos has increased, although it is kept within certain limits.*
- *The General Director holds regular meetings and gives violent reprimands. There are a huge number of meetings, so many that managers are there half the day. The director is trying to fix something, but he seems to think that it can be done by shouting.*
- *At first, the director dismissed shop managers, but then he realized that there was no one to*

replace them. Therefore, a certain stability emerged.

The lack of managerial ideas is evidenced by the fact that in order to improve production efficiency, a team was engaged to implement the Japanese 5S management system, which is very superficially understood and completely inadequate to Russian realities.

- *New managers started implementing the 5S management system. This is a Japanese system taken from the Toyota plant⁴ (Shingo, 2010). The implementation is handled by a specially created center. They impose rules of cleaning, cleanliness, efficiency. It is expressed in some formalities that no one takes seriously. For example, all over the factory they hang stands about increasing work efficiency, cleanliness at the workplace, etc.*
- *These managers are very detached from production. They don't know or understand it at all. They walk around the workshops, looking for irregularities, but they don't get involved in anything. Any real issue gets bogged down when they try to solve it.*

Moral atmosphere. The unhealthy moral atmosphere described by the Observer was also characteristic of many Soviet industries (Igrunov, 1990):

- *In the rubber case, the man expended an enormous amount of energy to prove that he shouldn't be doing it. A tiny fraction of that energy would have been enough to fix the problem. And that's how almost everyone behaves. People are tense, any little thing causes an explosion of discontent, grievances. People are very unfriendly. There are very few people who are benevolent.*

⁴ A set of principles developed by Toyota Motor. They include standardization, applying the 5S principles (Sort, Set in Order, Shine, Standardize, Sustain)

Conclusion

Our study identifies two types of economic objects. In the first one, the specifics of production are such that do not allow rationing labor based on the technological parameters of equipment⁵ (Rofe, 2003). In such productions, the rationed labor intensity ceases to correspond to the real one, and the norms themselves lose their technological validity, acquiring an arbitrary character. In the limit, the gap between the real and standardized labor intensity can be dozens of times, as it is in the case we have described.

The absence of reasonable norms creates specific relations, the main element of which becomes “bargaining” between management levels over the tension of labor tasks. In turn, this leads to the emergence of a special moral climate in the team: its meaning is to fend off any proposed work, despite the huge unused reserves.

In our case, the economic object in which such relations arose is marginal in terms of the number of employees and production importance. However, it can be assumed that similar relations, although not in such an extreme form, can arise in large industries (the example is ship repair enterprises).

Improving the efficiency of such industries and eliminating unhealthy moral atmosphere require a competent management approach. Unfortunately, management schools capable of solving such problems were not formed either in the late USSR or in the post-Soviet period. Attempts to introduce superficially understood foreign systems like 5S do not lead to results and only discredit the management ideology. However, without the

emergence of competent management schools, increasing production efficiency is an elusive task.

At the other pole of the ideal-typical scale, there is the main production, in which, at first glance, labor norms have a rigid technological reference. Perhaps, in reality it is not quite so, but for the ideal-typical construction such a hypothesis is suitable.

In the absence of reserves for increasing labor intensity, the increase in norms leads to the fact that workers, in an attempt to preserve their earnings, lengthen the working week (in our example, almost twice as long). In fact, this means the abolition of the Labor Code in terms of the duration of fixed working hours. This and other aspects of labor relations create a potential ground for acute conflict, although no such symptoms are currently visible.

The attempt to create an independent trade union has shown that today such initiatives are easily blocked by the administration of enterprises. On the other hand, at this stage the workers themselves are not ready to negotiate rationally with the administration.

Nevertheless, there are objective prerequisites for emerging independent trade unions. The lack of rational dialogue stabilizes the situation in the short and possibly medium term, but at the same time creates preconditions for passionary outbursts, which can have destructive consequences. To prevent such developments, it is necessary to promote the creation of institutions for rational harmonization of interests among different groups of workers, primarily workers and enterprise management.

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⁵ Forgotten discussions and unrealized ideas (1990). Compiled by E.B. Koritsky. Leningrad: LGU. 334 p.

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