PECULIARITIES OF GENERATION CYCLES IN THE SETTLEMENT DEVELOPMENT SEQUENCES

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Annotation. The article explores the relationship between generation cycles, settlement development, and economic progress. The authors argue that the cycles of development have led to a shift in societal values, particularly after World War II, with the "upper class" creating a state for the benefit of the "baby boomers" and their descendants. This shift has resulted in significant technological progress, which has concentrated in urban areas, and has led to a mass movement forward. However, this movement has come at the cost of decreased natural resources and increased social inequality.

The article also discusses the importance of balancing the "stability of development" with the need to allocate a portion of natural resources to scientific and technological progress. The authors suggest that finding the right balance will require the participation of each generation. Specifically, some generations are born during times of change and learn to use dynamic opportunities, while others are born during times of stability and slow predicted movement, which can lead to stagnation. The authors argue that each generation should have a chance for a better life than what is considered average, as well as the opportunity for sudden happiness.

Overall, the author suggests that by understanding the relationship between generation cycles, settlement development, and economic progress, it is possible to create a society that balances technological progress with social and environmental responsibility. Achieving this balance will require an ongoing effort from each generation, but it offers the potential for a peaceful jump in prosperity and the realization of the "American Dream."

Keywords: Generation cycles, Settlement development, Economic progress, Societal values.

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INTRODUCTION

Problem statement. The development of settlements, planned according to macro interests, shows a clear practical manifestation of a program-oriented approach [1] to the development of settlements. This approach is evident in the management of historical development periods of a territory (large and small scale) as well as in the operational management of small sub-cycles of regional development, within which generations play a clear role depending on the typical stage of the cycle, generation parameters, and the peculiarities of the cycle's progression at the current socio-technological level.

Analysis of recent research and publications. The development and sustainability of populated areas are widely studied in social and environmental sciences. The articles included in this reference list cover a range of topics related to populated areas, including discourse analysis, rural area sustainability, the atmosphere of shopping centers, technological transitions, social capital, and urbanism.

An article by Bloetevogel (2013) focuses on sustainable development and intergenerational justice, with particular emphasis on the role of discourse analysis in understanding the ways in which sustainable development is discussed and debated in society [1]. The article by Daniels and Lepping (2013) explore the concept of rural area sustainability and the need for planning that supports the long-term sustainability of rural communities [2].

Donovan and Rossiter's (1982) article examines the role of the shopping atmosphere in influencing consumer behavior, emphasizing the importance of environmental psychology in understanding how the physical environment shapes social interactions and economic activity [3]. Geels' (2002) article takes a multi-level perspective on technological transitions, exploring the complex interplay between technologies, markets, institutions, and social practices in driving long-term change [4]. Putnam's (1995) article on social capital argues that declining levels of civic engagement and social cohesion in modern society have important consequences for economic development and social well-being [5]. Wallace and Beck's (1996) article emphasizes the importance of the welfare state in shaping economic activity and creating opportunities for social mobility [6]. Finally, the classic article by Wirth (1938) on urbanism offers a foundational view of how urban life shapes social organization and cultural expression [7].

As you can see, a number of researchers on human capital in settlements have investigated generation cycles as a factor in managing elements of the program-oriented approach. However, more attention is needed to study the relationships and dependencies that determine the peculiarities of the generation cycle's development in the context of urban planning.

Goal of the article: characterize the parameters of the generation cycle and its relationship to other cycles and planning periods, including within the program-oriented approach.

RESULTS

As you've understood, generations interact in the mechanism of an economy based on urban settlements. We have seen from our previous research that generations of the human species, as carriers of defining socio-psychological attitudes, have proven to be important players in territorial development strategies, including those of cities.

Having established what happens in short and long cycles, which in turn make up the small and large cycles of development, let us now consider the origin and structure of the generational cycle. There are two approaches to defining a generation. Firstly, it is based on the age of achieving sexual maturity and obtaining the right to independently make choices for

one's future. Typically, this age falls between 14-17 years. It is at this stage that young people make choices about education, experience first love, become conscripts, and, due to their youth and inexperience but already possessing formal legal rights and life force, become the object of manipulation by society, politics, the economy, and their immediate environment. A generation can be considered from birth to the maximum age of 17 years - in the case where these individuals become participants in mass changes and trends.

The second approach is to count a generation from zero to the age of beginning independence in the economy, which is 28-30 years old, when a person makes significant decisions in their life. For example, when there are young children, a decision is made to change jobs and place of residence, some get divorced, while others build a house or buy real estate. These generations also become specialists who represent an "irreversible asset" - in other words, they lose the all-encompassing fear for their future, which was caused by their initial incompetence in the labor market - now they represent something and can change their lives. These "older" generations make more serious, significant decisions at this age, and they act more consciously compared to 17-year-olds.

In addition, within the generations, it is necessary to distinguish the "head," "main," and "tail" parts. As a rule, the representatives of the "head" part of the generation are born in epochs in which certain social changes will occur. They are born either to change something dramatically or to create the main regime of the era in which they will then live. They form the "tasks" and set the "work" for the main part of the generation, leading the way for them. They also establish the basic standards for the development of social, political, and economic processes. The "main part" of the generation is the main and mass performers of scenarios and plans for social development. And finally, the "tail part" lives at risk of not catching up with their own social process, and they (usually the younger siblings of the "main part") become participants or witnesses of pivotal events between Long and Short cycles. They live in a state of "perceiving changes" already created by carriers of another "assembly scheme," in other words, people belonging to another generation. Thus, it is worth highlighting the concept of an "assembly scheme": a set of circumstances that formed the tasks and character of a generation. In what historical period were they born? Was there a common phenomenon that seriously affected the lives of their parents, and what was the strongest emotion associated with it? Who was responsible for their upbringing, and what character trait developed most in them? And so on, there are 10-20 main factors that shape the character and goals, in simpler terms - the "assembly scheme" of such a generation.

For the city, as a platform for the progress of a micro-civilization, it is necessary to know which "assembly schemes" of generations and any periods of their development are present in this city, what roles they play, how they overlap with each other, how they compete and cooperate. The same is necessary to know in the dynamics of the next two strategic periods, based on which one generation cycle of any "line" or "sequence" of generations will change. In previous studies, we identified two main "sequences" of generations, the peaks of whose processes alternate every other one. These are the "first and third" (restorers and strategists), as well as the "second and fourth" (innovators and destroyers). In addition, other researchers distinguish "long" and "short" generations in the consideration of the generational cycle.

Thus, it is obvious that the "assembly schemes" of generations are not always strictly tied to the time of birth. There is an overlap of the time frames of their activity - the previous "assembly scheme" is still active and being born, already nearing completion; but at the same time, the first

representatives of the "assembly scheme" of the next generation are also being born, i.e. the "head" of the new generation. Thus, in two groups of roughly the same age, there may be two different approaches to life and value systems. Depending on the nature of the generation, "assembly schemes" may alternate every 25-30 years or even every 15-17 years. It should also be noted that the "assembly schemes" of generations are directly linked to the Long and Short cycles of development, as they are the cycles that determine the characteristics of each, even typical "assembly cycle" of a generation. In other words, the peculiarities of the current Long and Short cycles determine the subtle parameters of the "assembly cycle" of one or several generations.

In economic terms, during the active phase of a generation, one can consider the time of "entering the stage" and "leaving the stage" at the leader level. Typically, a leader is active for one strategic planning period (8-9 years), and in very rare cases, adequate leadership can be maintained for three electoral cycles (12 years). After this, there is a choice and a risk: the choice to obtain balanced stability with a wise leader, or the risk of obtaining authoritarianism and stagnation if the leader's resources are worn out by this time. Thus, we can identify a normal, acceptable 9-year period of strategic planning as the peak of leadership activity in generations in countries striving for consistency. Occasionally, in this calculation, one should also take into account the Short or Long Cycle of development, especially at stages near their turning points.

For the purposes of settlement development planning, it is necessary to have an understanding of the "streams" of each generation, within which the corresponding "waves" are identified. Each successive birth, born to parents who are approximately 25 years old at the time of their children's birth, are carriers of the characteristics of this generation. To understand the nature of these streams, it is also recommended to refer to my previous work on cycle studies. We will recall and deepen the main aspects applicable to the program-oriented approach to settlement development management.

As we previously defined, generations are divided by the nature of their tasks - into long and short ones, into "destroyers" (or innovators) and "builders" (or conservatives). Short generations are usually destroyers. They destroy with the aim of creative transformation of reality. Sometimes these experiments are successful, sometimes they are not. At the same time, the time of action of the "destroyers" on the "stage" falls at the end of long periods, when a generation is needed that will break a somewhat weakened empire torn apart by internal tensions and suffering from budget deficits. Despite the fact that destruction is generally perceived negatively in our society, it is precisely the "destroyers" who do their important work, clearing the "field" for the development and construction of the next generation. In our work, we mention the concept of the conditional "American dream" that every generation should have. Thus, when the "destroyers" at the beginning of their "stage" see that the "American dream" is no longer realistic for them or their children in society because organizational structures have already lost a significant portion of their potential, then they (the destroyers) directly or indirectly destroy this system.

The next and parallel generation (conservatives) benefits from this, which seems to act in conscious adulthood precisely when the previous generation of "destroyers" at the beginning of its "stage" (in youth) will break, for example, a large empire that completes a "Long" (55-year) period. Overall, such a type as "conservatives" represents the second "stream" of generations seemingly different people who give birth to descendants in this other "stream" and parallel to the "destroyers." They give birth to their children, and those children - their

own. Mass streams X and Y continue their own streams, so two streams go in parallel, with a time overlap of 15 years. This time interval is optimal to ensure the difference in the development of streams, so that representatives of the same stream are most likely to meet during their fertile age. Of course, there are exceptions (a difference of more than 15 years between a couple), but such situations make up a tiny percentage and do not determine the processes of mass evolution of society, including urban society. There are also strange but possible unions of spouses where the age difference exceeds 20 years, and thus these are representatives of the same stream, but through one generation (wave). For example, a couple where the man is 50 and the woman is 25.

We will also assume that streams can sometimes approach each other at a time intersection, although these phenomena are more characteristic of post-crisis processes, for example, during a turning point period, which are generally unique and do not belong to either Short or Long cycles. The configuration of generational streams also depends on whether the social process is in a Long or Short cycle. It is also unknown who exactly are the participants in the turning point processes

The simplified scheme of parallel development of 2 streams (stream of Generation X and stream of Generation Y) looks like this (based on a hypothetical baseline level from 1960 for illustrative purposes): 1960 - Generation 0 (innovators) enters the scene at the age of 35. Their children (Generation Y) are already 10 years old. 1965 - Generation 1 (conservatives) at the age of 25 gave birth to Generation X. Generation 0 (innovators) has been on the scene for 5 years (their children - Generation Y - are now 15 years old), but will leave the scene in 10 years. 1975 - After 10 years, Generation 1 enters the scene and stays there for 15 - 20 years. Children of Generation Y reach the age of 25 and give birth to their own children (Generation Y2). Generation 1 is active for 1 period of strategic planning (2 electoral cycles). 1985 - Children of Generation Y reach the age of 35 and enter the scene, competing with Generation 1. Note that the period of change of generations in power lasts for 5 years (1 electoral cycle). This is also a process of reform (more or less radical), depending on the current position in the Long or Short cycle. 1990 - Children (Generation X) of Generation 1 are just reaching the age of 25 and giving birth to their children (Generation X2, conservatives) as Generation 1 leaves the scene. Generation Y (innovators) has been on the scene for 5 years and will remain there for another 10 years, until 2000.

Now, as you see, the cycle from 1965 to 1990 (35 years) has closed. During the active period from 1960 to 1990, two different streams (X and Y) fully occupied the "stage of activity", and at the end of the cycle, there is a 5-year period of "transition" or "breakthrough" due to the crisis of neighboring streams staying on the stage.

Additionally, a 5-year war can destroy either a complete generation (1 wave 1 stream) or significantly reduce the number of those who are five years younger than them. Thus, war as a period of breakthrough releases space for the next stream to take the stage. Especially if there was significant tension due to the overlap of the stages of different streams, which on the one hand creates social tension and secret struggle for power, but on the other hand, has the risk of slowing down societal development processes because the older generation (e.g., stream X) on the stage suppresses the younger generation (e.g., stream Y), which has just come out on the stage.

These processes become visible at their inception, approximately 20-25 years before they have a chance to manifest. Thus, planning actions to correct the flow of streams is possible 25, and more confidently - 20 years before the time of correction.

After analyzing the previous development on this topic, you can see a

correspondence between 2 streams and 4 generations, alternating 1-3 and 2-4 by type of activity. The subject of further research may be whether there are any special "waves" during periods of crisis. However, if Generations 1 and 3 give birth to Generation 2, or Generation 4 (the neighboring stream), then there is no conflict of generations between parents and children because they are very different in their package of defining socio-psychological attitudes. That is, the birth of a neighboring stream likely leads to the absence of a conflict of generations. But usually the conflict of generations (which we observe from the 20th century until now, due to the alignment of spouses' age) exists because representatives of the same stream give birth to representatives of their stream. This conflict of generations is also a driver of cyclic changes of greater duration.

Practical implications. In our previous publications, we have already mentioned the cyclical collapses of economic systems of a territory, which are reflected in the life and development of a city. Among the issues that arise when considering the process of "plundering a rich territory" is the achievement of a pension savings system. Perhaps the goods accumulated before the collapse were reinvested in pension instruments? Thus, the generation of children or even grandchildren of the "first generation of restorers" in a mature state should receive their bonus in the form of a substantial pension supplement, but this is not the case. Can it happen again that our state, concerned with its own resource potential and development, will begin to actively accumulate pension funds and, in 25-30 years, we will also come to a situation where someone as agile and cunning as during the collapse of the USSR will want to appropriate state pensions earned by two or three generations?

Thus, it should be noted that cycles of "bottom-up development of the economy" periodically repeat for the next 2-4 generations (as an illustration, in rough approximation, the Long Cycle lasts for 55-60 years and the Short Cycle for 20-25 years, although in each cycle, 2 or 4 generations move with temporal overlap), and cities serve as ready-made platforms for the implementation of the conditions of the next technological paradigm. Furthermore, since countries periodically dispose of their assets to correct their own mistakes and write off debts or to bring the situation back to the starting point according to cycles, territorial governance and especially politicians do not possess the valuable experience of generations as a mass processed knowledge that is barely accumulating in society.

Against the background of the existence of two "queues" or "lines" of generations (builders and destroyers), the question of how many generations it takes to build a peaceful life appears to be inappropriate. Due to the same reason of alternation and overlap of oppositely directed "builders" and "destroyers," we observe throughout reachable history a desire not only to build, but also to then destroy and build anew for one's own benefit, each time building one's own social status. As an example, World War II occurred. The previous generation built industrialization, which was destroyed by wars, and the next generation, after 5-10 years, began to build a different level of technologies at an accelerated pace, thus jumping almost one and a half technological paradigms in 30-40 years, which would have been possible in a longer period under normal gradual conditions, maybe 70 years. Thus, generations are a convenient tool for tracking the speed and dynamics of development cycles. How much is the Short cycle accelerated or the Long cycle limited or vice versa, extended? How are the representatives of generations emotionally directed in this cycle, and what can be expected of them? This allows the city to build development scenarios based on a better understanding of the people who live and will live in it in the next few decades.

Overall, we observe that not only GDP and market mechanisms, but rather Cycles,

which are a framework of the Program-oriented approach, as well as the "embedded" generations as components of cycles, have determined the rapid growth of the well-being of the average citizen that we have seen since the third quarter of the 20th century. The cycles have a typical character, and Short and Long cycles usually repeat at higher levels of technical and social development. These Cycles are located in a complex field of evaluation and intersect with social and technical spheres, and among other things, determine the well-being of the population. Rather, changes in Cycles were able to provide a new technology of redistribution of social goods, reinforced by new technologies. The world has changed dramatically in about 100 years. After the colossal military sacrifices, a new generation was born, and they became carriers and supporters of this new world. The same, by the way, happened, albeit on a smaller scale, after the First World War - a new generation was born, and there was a colossal leap in the economy, technology, and even in the social sphere, although of regional nature.

As you can see, thanks to the development cycles introduced in the 20th century, following the First and especially the Second World War, a change occurred whereby the wealthier and noble stratas decided to share a portion of the national wealth with the poorer stratas. They began doing this in the 1950s, and within about 30 years they overcame a century of underdevelopment. This required a complex set of changes, starting with the mindset of the elite and the population, through technologies and new materials, and ending with economic theory and social systems that have fundamentally different goals than before. To achieve such a high level of development, a lot of people were needed, who then settled in post-war cities.

CONCLUSIONS

The sequence and pace of development cycles, especially after World War II, forced society to shift its values to a different position: the "elites" created a state already for other people who began to be born in the 1950s - i.e. for the "baby boomers" and their descendants. Thus, the First and especially the Second World War fundamentally transformed the society they touched. 1 or 2 old generations were largely eliminated, and with it our society moved up 2-3 steps evolutionarily higher than at the beginning of the 20th century. However, this movement was associated with a significant reduction in the role of the ruling aristocracy, mixing social classes, and increased use of natural resources. But there was a forced mass technological movement forward by the forces of at least one newly born generation, which positively embraced the idea of progress and went the way of developing technologies that began to concentrate in and around cities. And in the 2000s, sustainable development (possibly a sign of the beginning of a new Long Cycle) replaced the technical sphere of progress with an ecological sphere, thus making the very concept of a kind of controversy between progress and sustainability, since for progress, in the triangle of factors of sustainable development, one must substitute "science and technology" for "nature." It was this process of forced development that allowed us to see that the rhythm and pace of social progress can be determined, and generations serve as both a driving force and a marker of such transformation speed.

For the future generation, especially the young "disruptors," it may be possible to balance "development stability" by understanding how much of "science and technology" should take up a portion of "nature" in the aforementioned triangle. Note that if humanity finds a path with the appropriate cycle and generation that allows it to increase the share of "science-technology" in the triangle of "technology-nature-society" without destroying the corresponding sector of nature, it can create a gateway to the next technological paradigm, namely, to create a package of non-destructive technologies that will

allow "something useful" to be obtained from "nothing" or "almost nothing."

As mentioned earlier, Long and Short Cycles contain generations. Some generations are born during times of change and learn to use dynamic opportunities, while others are born during periods of stability and slow, predictable movement that turns into stagnation. It is likely that each generation needs a chance to live better than they are statistically able to. This includes initiatives such as privatization, land distribution, merit awards, inflationary prices, or successful earnings and profitable trading based on price and currency differentials. Society needs to give a chance for a peaceful leap in prosperity, so that the most initiative members of a generation always have an alternative way out and sudden happiness. Otherwise, such a generation is unlikely to believe in what we call the "American Dream" because they will not have it and will deform themselves and the society around them.

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