

Chronostructures of Meaning and Rhythms of Subjectivity in Critical Realism

Chronostruktury sensu i rytmy podmiotowości w perspektywie realizmu krytycznego

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Abstract: This article develops a critical realist framework for analysing subjectivity as constituted through social time. It conceptualises rhythm as an emergent, meaning-generating temporal structure that conditions the relationship between social structure and human agency. The framework comprises four analytical categories: rhythmic chronostructure, rhythms of subjectivity, rhythmic agency, and temporal reflexivity. To illustrate their empirical relevance, the article uses selected CAWI data from the first wave of the *Youth 4.0* project (N = 24,483), comprising adolescents aged 13–14, young people aged 15–25, and parents or guardians, contextually supplemented by focus group material. The data are interpreted heuristically as symptoms of rhythmisation rather than as direct evidence of underlying causal mechanisms. The analysis focuses on national identity, institutional trust, community rituals, and future-oriented agency, examining the synchronisation and desynchronisation of institutional and biographical rhythms. It suggests that disruptions associated with the COVID-19 pandemic and technological transformation are linked to the fragmentation of meaning and reduced well-being, whereas progressive synchronisation supports reflexive identity and agency. The article contributes a typology of progressive, stable, and regressive chronostructures and offers a framework for further research on social time, education, youth subjectivity, and well-being.

Keywords: critical realism, rhythmic morphodynamics, social time, youth subjectivity, rhythmic agency, temporal reflexivity, rhythmanalysis, rhythmic chronostructure



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Abstrakt: Artykuł rozwija opartą na realizmie krytycznym ramę analizy podmiotowości kształtowanej w strukturach czasu społecznego. Rytm jest ujmowany jako emergentna, temporalna struktura sensotwórcza, która warunkuje relację między strukturą społeczną a sprawstwem jednostki. Proponowana rama obejmuje cztery kategorie analityczne: chronostrukturę rytmiczną, rytmy podmiotowości, sprawczość rytmiczną oraz refleksyjność temporalną. W celu zilustrowania ich znaczenia empirycznego wykorzystano wybrane dane CAWI z pierwszej fali projektu *Młodzież 4.0* (N = 24 483), obejmujące młodzież w wieku 13–14 lat, młodych ludzi w wieku 15–25 lat oraz rodziców lub opiekunów, uzupełnione kontekstowo o materiał z wywiadów fokusowych. Dane są interpretowane heurystycznie jako symptomy rytmiczacji, a nie jako bezpośrednie dowody działania mechanizmów przyczynowych leżących u ich podstawy. Analiza koncentruje się na tożsamości narodowej, zaufaniu instytucjonalnym, rytuałach wspólnotowych i sprawstwie ukierunkowanym na przyszłość, uwzględniając synchronizację i desynchronizację rytmów instytucjonalnych oraz biograficznych. Wyniki sugerują, że zakłócenia związane z pandemią COVID-19 i transformacją technologiczną wiążą się z fragmentaryzacją sensu i obniżeniem dobrostanu, natomiast progresywna synchronizacja wspiera rozwój refleksyjnej tożsamości i sprawstwa. Wkładem artykułu jest typologia chronostruktur progresywnych, stabilnych i regresywnych oraz ramowa koncepcja dalszych badań nad czasem społecznym, edukacją, podmiotowością młodzieży i dobrostanem.

Słowa kluczowe: realizm krytyczny, morfodynamika rytmiczna, czas społeczny, podmiotowość młodzieży, sprawczość rytmiczna, refleksyjność temporalna, rytmoanaliza, chronostruktura rytmiczna

INTRODUCTION: SUBJECTIVITY IN THE RHYTHMS OF SOCIAL TIME

Contemporary sociology is reconsidering the concept of subjectivity. Technological, cultural, and educational changes influence not only the functioning of individuals but also the conditions under which identity and agency are shaped. The concept of time, understood as the socially organised rhythm of individual and institutional life, has therefore become crucial.

This article is set within the framework of critical realism (Bhaskar 1975; Archer 1995) and draws on Polish work on morphodynamics. Against this backdrop, the following research questions are formulated:

- How do social rhythms (institutional, community, and familial) influence the processes of individual self-definition?
- To what extent does the rhythmic structure of time foster the development of reflexivity or contribute to identity regression?
- What are the conditions for achieving synchrony between the rhythm of institutions and the rhythm of an individual's biography?

The aim of this article is to outline a theoretical and empirical framework for analysing the rhythms of subjectivity among young people. The proposed approach complements structuralist, interactionist, and constructivist perspectives, by emphasising the temporal dimension of meaning.

This article develops a rhythm analytical perspective in the spirit of critical realism, conceptualising social rhythms as meaning-generating temporal structures that constitute biographical and axionormative patterns. The point of reference for the analysis is data from the *Youth 4.0* (Młodzież 4.0) project, interpreted as manifestations of the rhythmisation of values, identity, and agency. The central question guiding the analysis is the extent to which social rhythms enable or constrain the constitution of meaning-generating subjectivity. The article's contribution lies in reinterpreting rhythm as a generative mechanism within the ontology of critical realism and introducing the category of the chronostructure as a form of temporal organisation that conditions the relationship between reflexivity and agency.

1. THEORETICAL ASSUMPTIONS

The starting point for the present discussion is the concept of the human person as a dynamic subject, shaped by educational, cultural, and meaning-generating rhythms. Individual development is understood as a process of the rhythmisation of meaning in relation to changing social forms. The theoretical framework is based on critical realism (Bhaskar 1975; Archer 1995) and the concept of morphodynamics developed in Polish sociology (Woś 2024b). This approach is complemented by theories of social time developed by Rosa (2013), Adam (1990), and Lefebvre (2004), who conceptualise time as a social structure that organises experience. In axionormative sociology, upbringing is understood as the rhythmic introduction of the individual into the world of values (Woś 2024a). This framework provides the starting point for the empirical analysis that follows.

1.1. Morphodynamics and Critical Realism (Bhaskar, Archer, Woś)

Morphodynamics, developed in Polish sociological circles (Woś 2024b, 121-127), integrates the principles of Bhaskar's (1975) critical realism and Archer's (1995, 2003) theory of morphogenesis, explaining how individuals construct their identity in relation to the axionormative social order. Social change occurs through rhythmic sequences of fluctuations in structures and meanings, referred to as "fluctuations of forms."

Within Bhaskar's stratified ontology, rhythmicity may be interpreted as an emergent property rooted in the real domain and manifested in the relationship between structure and experience (Bhaskar 1975, 12-34). Archer (1995, 154-165; 2003, 130-133) develops this ontological foundation through her theory of morphogenesis - a four-stage model of social change (T1-T4) in which structures and actions jointly produce a cyclical dynamic: from the initial structure, through interaction and elaboration, to a new structure that becomes the starting point for the next cycle. In the Polish context, Woś (2024b, 121-127) emphasises the importance of this theory for understanding the relationship between structure and agency, extending it to include the axionormative and temporal dimensions.

Archer (2003, 84-85; 130-135) argues that the individual is not a passive product of structures, but a reflexive subject who, through the "internal conversation," transforms

structural influences into strategies for action. Woś's morphodynamics emphasises the rhythmic and meaning-generating dimension of subjectivity: rhythm becomes a form through which meaning emerges in the relationship between structure and agency.

Table 1. Relationships between Bhaskar, Archer and Woś in the perspective of rhythmic morphodynamics

Author / theory	Ontological level	Epistemological level	Methodological level	Contribution to the rhythmic approach
Roy Bhaskar (1975)	Stratified reality: <i>the real, the actual, and the empirical domains</i> ; emergence as the organising principle of the social world.	Knowledge as the discovery of real causal mechanisms.	Critical analysis of the conditions of possibility for action and change.	Enables rhythm to be interpreted as an emergent mechanism operating within the real domain.
Margaret S. Archer (1995; 2003)	The relationship between structure and agency in temporal sequences (T1-T4).	Reflexivity as a mediator between structure and action (<i>internal conversation</i>).	Morphogenetic model: analysis of cyclical change.	Introduces rhythm as a morphogenetic trajectory that conditions agency.
Marek Woś (2023a; 2024b)	Time and values as elements of the rhythmic structure of social reality.	Subjectivity as the outcome of the rhythmic synchronisation of meaning and action.	Morphodynamics: analysis of the fluctuations of forms and meanings in the rhythmic cycles of upbringing.	Introduces the category of the rhythms of meaning and "fluctuations of forms" as the foundation of the concept of rhythmic subjectivity.

Source: Author's own elaboration based on Bhaskar (1975), Archer (1995; 2003) and Woś (2023a; 2024b).

1.2. Social Rhythm as a Structure of Meaning (Lefebvre, Adam, Rosa et al.)

Rhythm is a category that connects social time with the constitution of meaning and action. From Lefebvre's (2004) perspective, it is the repetitive structure of everyday life, encompassing biological, social, and spatial orders. Barbara Adam (1990) argues that time functions as a normative regime regulating practices and expectations, while Rosa (2013) describes the

acceleration of modernity as a process of the destabilisation of rhythms, leading to alienation and a loss of rootedness.

In classical approaches (Durkheim, Elias, Bourdieu, and Giddens), time is not conceptualised rhythmically but through the temporality of practices and the reproduction of social order. In the present approach, rhythm is conceptualised as a relational temporal structure that mediates between institutions and biography, organising the course of action and its meaning over time.

This approach gives rise to the concept of the rhythmic chronostructure - a socially organised temporal system in which identity and agency are constituted. This concept aligns with Polish studies of social time, which emphasise the normative and institutional dimensions of temporality (see Bukowski and Kopczyńska 2025; Zajadacz and Młynarczyk 2010). The rhythmic chronostructure serves as a bridge between critical realism and symbolic constructivism, laying the groundwork for an ontological understanding of rhythmic subjectivity (see Section 1.3).

These approaches are not treated symmetrically or cumulatively. Lefebvre's concept provides a language for describing the repetition and variation of rhythms but remains at the phenomenological level and does not explain their generative power (Lefebvre 2004). Barbara Adam's approach captures the normative dimension of time as a regulator of practices but does not reconstruct the mechanisms through which it operates (Adam 1990). Rosa's diagnosis of acceleration, in turn, points to the effects of the destabilisation of rhythms, but is macro-sociological in nature and does not provide tools for analysing the relationship between structure and agency at the micro level (Rosa 2013, 22-30; 106-121).

In the proposed model, the following elements are selectively reworked: the concept of rhythm as a pattern of repetition is adopted from Lefebvre; its normative dimension from Adam; and the diagnosis of acceleration as a condition of disruption from Rosa. However, all these approaches are embedded in the ontology of critical realism, in which rhythm is treated as an emergent mechanism operating within the real domain and conditioning the possibilities of action and the constitution of meaning (Bhaskar 1975, 13-17). The proposed approach forms a part of a growing body of research on temporality and the technological conditions of action that has emerged in recent years within the sociology of time and technology studies.

1.3. Ontology of Rhythm: A Proposal for Rhythmic Subjectivity

Analysing rhythm as a structure of meaning leads to the question of its role in the constitution of subjectivity. Subjectivity is shaped by configurations of practices embedded in time, whose organisation takes the form of rhythms. In the subsequent analysis, two categories assume central importance: the chronostructure and rhythmic agency, while the remaining categories play a complementary role. Accordingly, the chronostructure is understood here as a socially produced temporal framework that organises the course of actions and their meaning over time.

According to Woś (2023a, 22-27), social time shapes personal structures through the rhythms of upbringing, values, and culture. Mead's (1934, 173-178) account of the relationship between the "I" and the "Me" may be interpreted here as a rhythmic dialectic of spontaneity and the internalisation of norms - analogous to rhythmic morphodynamics, in which subjectivity arises at the intersection of internalised norms and the creative transformation of social rhythms.

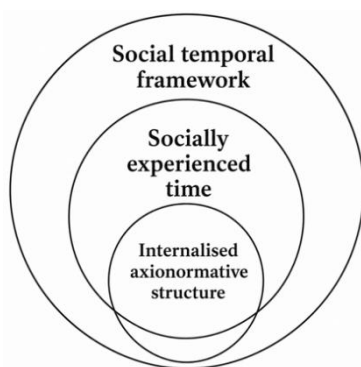
On this basis, the concept of morphodynamics (Woś 2024b, 131-135) was extended, in line with critical realism (Archer 1988, 78-83), to include the dimension of the rhythms of subjectivity, understood as temporally and meaningfully structured patterns through which identity and agency are constituted. Four related analytical categories are distinguished:

1. Rhythmic chronostructure - the order of institutional rhythms (the real domain).
2. Rhythms of subjectivity - patterns of individual synchronisation with institutional, community, and biographical rhythms (the actual domain).
3. Rhythmic agency - the emergent capacity to challenge and reinterpret rhythms, whose potential belongs to the real domain, whose enactment occurs in the actual domain, and whose effects may be experienced in the empirical domain.
4. Temporal reflexivity - the awareness of, and the capacity to, transform rhythms through reflection on their meaning-generating dimension.

These categories are heuristic in nature, but they are rooted in Bhaskar's ontology of emergence, in which rhythms are emergent properties of social relations that organise the possibilities for action. Rhythm simultaneously performs ontological, epistemological, and

critical functions, organising the conditions of action, its interpretation, and the possibilities for its transformation.

Figure 1. The structure of social time as a dynamic configuration of layers in the rhythmisation of meaning



Source: Author's own elaboration.

The proposed categories can be studied using qualitative methods - biographical interviews, narrative analysis, and observation of rituals. Figure 1 illustrates three levels at which meaning is rhythmised - the institutional, communal, and identity levels - presenting time as a carrier of meaning and a frame of reference for agential action. Contemporary research on social time (Bergmann 1992, 81-134; Baert 1992, 97-101; Abbott 2001, 130-135) points to the need for further operationalisation of rhythms of meaning in empirical research, which forms the focus of the following section.

2. METHODOLOGICAL ASSUMPTIONS AND DATA SOURCES

Based on the theoretical assumptions outlined above, an analysis of selected empirical data illustrating the rhythmic dimension of young people's subjectivity was conducted. The aim of the research is not to reconstruct social practices in a statistical sense but to identify symptoms of the rhythmisation of meaning in the experiences of young people. Data from the *Youth 4.0* project were used for this purpose, interpreted as manifestations of synchrony, desynchrony, and reconfiguration of social rhythms.

2.1. Nature and Sources of Data (Youth 4.0 Project)

The empirical analysis is based on data from the *Youth 4.0* project, conducted by the TWP Academy of Applied Sciences in Szczecin and funded by the Polish Ministry of Education and Science. The project, *Determinants of Behaviour and the Anchoring of the Attitudes of the Young Generation of Poles Towards Socio-Cultural Risk Areas (from the Perspective of Resilience Theory)*, aimed to identify patterns of values, identity, and agency among young people. The purpose of this section is to illustrate the rhythmicity manifested in declarations, rituals, and temporal tensions, rather than to provide a statistical reconstruction of social practices.

The study is based primarily on the CAWI method; selected components (including analyses by Kurzępa and Kopeć, and by Woś) were supplemented with focus group interviews (FGIs), giving the project the character of an initial triangulation, rather than a full-scale ethnographic study (Urbanik 2023a). Data from the first wave of the main study (Q3-Q4 2022) were used, comprising $N = 24,483$ individual responses across three groups: adolescents aged 13-14 ($N = 1,733$), young people aged 15-25 ($N = 20,776$), and parents or guardians ($N = 1,974$). The analysis is illustrative in nature and focuses on identifying patterns of recurrence interpreted as symptoms of the rhythmisation of meaning and values.

The sample was selected purposively rather than randomly, and the data were collected using CAWI. Respondents were recruited through their accessibility in the digital environment and their willingness to participate in the study. The sample was diversified in terms of age and family status, but it is not statistically representative. Consequently, the data should be interpreted as exploratory, allowing for the identification of patterns and tendencies, rather than population-level generalisations.

Triangulation and limitations. The project incorporates an FGI component used in publications stemming from the *Youth 4.0* project (Woś 2023b; Kurzępa and Kopeć 2023), which supports the claim of partial triangulation. Its limitations include: (1) the absence of long-term participant observation, (2) the absence of panel data, and (3) the lack of a systematic application of qualitative methods specifically designed for rhythm analysis (e.g., rhythm diaries and temporal calendars).

Ethical aspects. CAWI data were collected in accordance with the principles of research ethics and the GDPR. Participants were informed about the purpose of the study and gave their informed consent to participate. The data are presented in an aggregated and anonymised form.

Analytical assumptions. For the initial operationalisation of rhythmicity, a heuristic typology of indicators was adopted, consistent with Lefebvre's rhythmanalysis and Zerubavel's theoretical insights. The responses are treated as traces of rhythm (patterns), rather than as causal evidence. Three categories were distinguished:

1. Indicators of the recurrence of declarations (e.g. national pride as a manifestation of the ritualisation of identity);
2. Indicators of belonging to structures of meaning (e.g. trust in the school, the Church, and the state as institutions that rhythmatises life);
3. Indicators of the temporal orientation of the subject (e.g. planning for the future and reflecting on the past as elements of temporal reflexivity).

To illustrate this heuristic framework, the table below presents selected survey questions together with their classification according to rhythm category, type of rhythmicity, and analytical interpretation.

Table 2. Heuristic rhythmic codes in the *Youth 4.0* study

CAWI question	Rhythm Category	Type of Rhythmicity	Rhythmic Interpretation
Do you feel proud to be Polish?	National identity	Stable/Disrupted	Indicator of the ritualisation of national identity (intergenerational transmission)
Do you trust the school as an institution?	Institutional trust	Stable/Withdrawn	Symptom of embeddedness in the educational rhythm (institutional chronostructure)
Do you regularly participate in religious practices?	Community rituals	Progressive/Fading	Reflection of the ritualisation of meaning and community values
Do you feel you have control over your own future?	Agentic subjectivity	Dissonant/Coherent	Indicator of the rhythm of reflexive planning (trajectory of agency)

CAWI question	Rhythm Category	Type of Rhythmicity	Rhythmic Interpretation
How often do you talk to your family about important matters?	Communicative rhythm	Coherent/Unstable	Indicator of the maintenance of family bonds and the transmission of meaning

Source: Author's own elaboration based on data from the *Youth 4.0* project (Urbanik 2023a).

This classification is not intended as a measurement instrument; rather, it is designed to identify rhythms as patterns of meaning rooted in repetitive responses and social practices. Qualitative data from FGIs serve a contextual function and provide a basis for further research on rituals and temporal reflexivity.

2.2. The Rhythm Heuristic as a Research Framework

The aim of this section is to present a heuristic framework for identifying rhythmic subjectivity in empirical material. These assumptions are heuristic in nature and serve as a basis for designing processual research.

Three qualitative approaches:

1. Biographical narratives - enable the identification of temporal patterns (development, crises, turning points) and points of synchrony and desynchrony between institutional rhythms and individual biographies.
2. Rhythm diaries - document daily cycles of activities, interruptions, and tensions, revealing the microrhythms of everyday practices (Lefebvre 2004; Zerubavel 1985).
3. Observation of everyday rituals - reveals social rhythmic structures (school, community, and technological rituals) and their meaning-generating function.

The analytical procedure includes:

- (1) identifying temporal episodes as units of analysis;
- (2) coding rhythmic events (repetition, cyclicity, interruptions) and their carriers (institutions, communities, technologies);
- (3) classifying them according to rhythm categories (identity, institutional, community, reflexive-agential);

- (4) analysing the relationships between rhythms - synchrony, desynchrony, and resynchronisation;
- (5) identifying temporal mechanisms operating within the real domain (e.g., assessment cycles, ritual calendars);
- (6) validating and triangulating sources (Bhaskar 1975; Archer 1995).

For the purposes of the proposed qualitative procedure, a recurrent pattern may be provisionally coded as rhythmic when it occurs at least three times within the same type of activity and displays regularity, meaning-generating significance, and social embeddedness. Interpretive rigour is ensured by maintaining a transparent coding log and checking the consistency of the coding.

In the analysis of the CAWI data, a symptomatic reading is adopted: responses are interpreted as traces of rhythm rather than as causal evidence. Repetitive declarations (e.g. national pride) are treated as manifestations of the ritualisation of identity; trust in institutions as an indicator of embeddedness in chronostructures; and the sense of having an influence over one's future as an expression of temporal reflexivity.

The purpose of this heuristic is to identify the mechanisms of synchronisation, desynchronisation, and the reorganisation of rhythms that condition the development of reflexive and agentic subjectivity. The analysis highlights the particular role of three spheres of rhythmic meaning: national identity, institutional trust, and community rituals. These proposals are programmatic, serving as a starting point for further narrative, diary-based, and observational research.

2.3. Notes on the Interpretation of Data as Indicators of the Rhythms of Meaning

Empirical data are treated as symptoms of rhythmisation - or its disruptions - within the domain of meaning, indicating the operation of hidden temporal mechanisms. Unlike classical quantitative indicators, they reflect patterns of repetition present in individuals' practices and declarations. Indicators such as national identification, community participation, pride in belonging, and trust in institutions reveal the rhythmic foundations of the constitution of meaning.

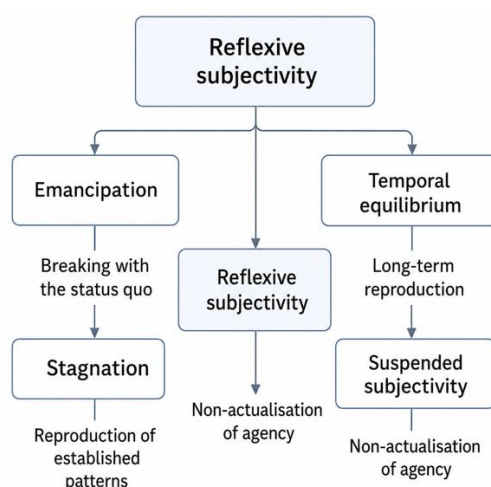
In the spirit of critical realism (Bhaskar 1975), the rhythmic patterns observed in responses reflect the operation of structures rooted in the real domain, which become manifest through empirical practices. Particular importance is attached to the triangulation of data and to taking into account temporal variables such as the school cycle, the rhythm of the year, and rites of passage, as these reveal the mechanisms of synchrony and desynchrony in the process of the constitution of meaning.

Combining quantitative and qualitative methods allows for a more comprehensive understanding of the rhythmic mechanisms of subjectivity. The next section discusses how rhythmic patterns of meaning are reflected in the practices of young people, constituting symptoms of the rhythmic organisation of meaning and agency. A symptomatic reading assumes that repetitive response patterns indicate the operation of hidden temporal mechanisms, whose reconstruction constitutes the primary objective of the analysis.

3. RHYTHMS OF SUBJECTIVITY - ANALYSIS OF EMPIRICAL DATA

The analysis of the empirical data reveals the rhythms of subjectivity as symptoms of diverse temporal configurations that can be interpreted as manifestations of rhythmic mechanisms operating within the real domain. In the spirit of critical realism (Bhaskar 1975; Archer 1995), subjectivity does not develop linearly but oscillates between rhythms of meaning shaped by social structure, values, and the experience of time.

Figure 2. A map of the temporal trajectories of rhythmic subjectivity from a morphodynamic perspective



Source: Author's own elaboration.

The diagram illustrates the need for the continuous renewal of rhythmic agency: temporal equilibrium may stabilise identity, but an excess of equilibrium risks leading to inertia; emancipation breaks the status quo, but without the renewal of rhythmic agency, it may be short-lived. Rhythmic agency denotes the capacity to regulate social rhythms creatively in accordance with the individual's values and goals. It is not passive adaptation but the management of the relationship between personal and institutional rhythms. Indicators such as national pride, institutional trust, and participation in community rituals are interpreted here as symptoms of the (de)synchronisation of the rhythms of meaning.

3.1. National Identity and Pride as Indicators of Rhythm

Data from the *Youth 4.0* project show that 49% of 13-14-year-old pupils, 36% of young people aged 15-25, and 35% of parents or guardians rarely or never experience national pride (Urbanik 2023b, 16-17, 122, 257). This suggests a weakening of embeddedness within structures of meaning. At the same time, 38% of the younger respondents and more than half of the older group report experiencing pride frequently. FGI material from the *Youth 4.0* project also indicates the recurrence of symbolic practices associated with national commemoration.

Table 3. National identity and pride as indicators of the rhythmic structure of meaning (*Youth 4.0*)

Category	13-14 years	15-25 years	Parents/Guardians	Rhythmic interpretation
Identification as "Polish"	44%	49%	47%	Stable rhythm, less pronounced among the younger cohort
Identification as a "European"	26%	14%	23%	Pluralistic rhythm (broader frame of reference)
National pride ("rarely" or "never")	49%	36%	35%	Disrupted rhythm (desynchronisation between institution and biography)

Source: Author's own elaboration based on data from the *Youth 4.0* project (Urbanik 2023a).

The results suggest the fragmentation of the identity rhythm - values and patterns of identification do not form a coherent temporal sequence.

3.2. Disruptions and Types of Chronostructures: Pandemic, Technology, Resynchronisation

The COVID-19 pandemic and technological transformation disrupted educational, community, and family rhythms (Woś 2024c, 116-117), causing temporal disorientation and weakening agency. The *Youth 4.0* report indicates that “the COVID-19 pandemic significantly affected young people's sense of stability and their engagement in school activities” (Urbanik 2023b, 121). The literature emphasises the consequences of such disruptions: declining well-being, alienation, and the loss of resonance (Rosa 2013, 198-212; 290-310; Han 2015, 21-25; 46-53; Woś 2023b, 115-117).

Against this background, the following condensed typology of chronostructures may be proposed:

Table 4. Types of rhythmic chronostructures

Type	Social Function	Effects on Subjectivity
Progressive	Supports development, integration, and dialogue	Reflexivity and a stable identity
Stable (passive)	Maintains order and predictability	Risk of stagnation and formalism
Regressive	Disrupts the rhythms of meaning and undermines community cohesion	Identity crisis and disorientation

Source: Author's own elaboration based on the concept of rhythmic morphodynamics.

The pandemic is an example of a regressive chronostructure (the loss of rituals and interrupted cyclicity). At the same time, technologies - although they generate acceleration and fragmentation - can also perform a resynchronising function by compensating for isolation, placing new demands on the body while simultaneously expanding the possibilities for action (Bukowski and Kopczyńska 2025, 14).

The findings are consistent with research on social acceleration and its consequences for subjectivity. Rosa argues that acceleration leads to the shortening of action horizons and weakens the possibility of the stable integration of experience over time (Rosa 2013, 106-121). Similar conclusions have been reached in research on young people functioning in the digital environment, where high levels of declarative reflexivity coexist with a limited capacity for long-term action. The findings of the *Youth 4.0* project are consistent with this line of research,

pointing to the importance of temporal disruptions as a factor mediating between social structure and individual agency.

3.3. Rhythm Synchronisation in Upbringing: The Role of the Teacher and Well-Being

The teacher, as the organiser of institutional time, co-creates rituals, repetitions, and pauses that give meaning to students' everyday practices. From the perspective of rhythmic morphodynamics, this role operates across three domains (Bhaskar 1975): the real domain (the creation of temporal and normative frameworks), the actual domain (the organisation of practices), and the empirical domain (participation in students' experience of social rhythms). For example, the environment of Salesian schools - combining educational, liturgical, and community rhythms - fosters progressive synchrony through the shared rhythm of the day, the week, and the year.

In Woś's approach, social forms are understood as rhythmic responses to structural and cultural challenges; upbringing, as an axionormative rhythm, shapes the microdynamics of identity (Woś 2023a, 87-94; 189-197; 213-220). Synchronisation does not imply rigid standardisation; rather, it involves coordinating institutional and biographical rhythms in order to sustain resonance and well-being (Rosa 2013; Han 2015). This is the teacher's role as a mediator between structure and biography - a prerequisite for maintaining progressive rhythms and reducing desynchronisation.

4. RHYTHMIC AGENCY AND TEMPORAL REFLEXIVITY IN RHYTHMIC CHRONOSTRUCTURES

Rhythmic subjectivity emerges from the relationship between the structure of time and the individual's reflexivity. Two key mechanisms are rhythmic agency and temporal reflexivity - the capacities that enable individuals to reinterpret, modulate, and synchronise social rhythms within existing chronostructures. In critical realism, agency is not a mechanical reaction but the result of the internal conversation, which transforms structural influences into strategies for action (Archer 2003, 84-85). Meanings, in turn, are constituted through interaction (Blumer 1969, 2-6), co-generating the rhythms of meaning experienced in everyday practices. Within the context of education, progressive rhythms emerge where the school and the broader social environment enable individuals to enter the world of values in a rhythmic manner. In this

context, volunteering can be understood as a form of translating social rhythms into personal rhythms (Woś 2022, 55-66).

4.1. Rhythmic Agency

Definition: The capacity to consciously regulate the rhythms of life through their reinterpretation, modulation, synchronisation, and - when necessary - transcendence. It is neither passive adaptation nor alienation, but the creative recombination of personal and institutional rhythms.

Function under conditions of acceleration: Under conditions of sensory overload and perceptual acceleration (Rosa 2013, 149-174; Han 2015, 7-15), rhythmic agency sustains the continuity of personal narrative, enabling the creation and maintenance of the rhythms of meaning (Rosa 2013, 280-287; Han 2015, 25-31).

Ontological anchoring: As a temporal competence, rhythmic agency is grounded in the emergent properties of subjectivity (Bhaskar 1975; Archer 2003) and operates across three domains:

- (1) the real domain - the potential embedded in the structure of subjectivity;
- (2) the actual domain - practical modulation of rhythms in social contexts;
- (3) the empirical domain - experienced self-regulation and the experience of meaning in the rhythms of everyday life.

4.2. Temporal Reflexivity

Definition: The capacity to manage rhythms across the biographical and institutional dimensions by recognising, evaluating, and reorganising them in accordance with one's values and goals. The underlying mechanism is the internal conversation (Archer 2003), which mediates between structure and agency.

Minimal procedure (three steps).

1. Diagnosing overload, monotony, and the (im)balance of rhythms;

2. Assessing their alignment with one's values (what supports development and what fragments meaning);

3. Designing alternative sequences of action that foster personal, community, and institutional synchrony.

Practical significance: Within the context of education (with adult support), temporal reflexivity is not a luxury but a prerequisite for maintaining self-coherence and the capacity for conscious action under changing temporal regimes.

4.3. Practices and Well-Being: Rituals, Narratives, Initiatives

Three dimensions of practices of rhythmic agency:

- Rites of passage (the beginning and end of the school year, final examinations, celebrations) anchor biography by connecting personal and institutional rhythms.
- Narratives of meaning - stories of crises and turning points - organise sequences of experience, giving them a coherent biographical rhythm.
- Grassroots initiatives (student self-government, social projects, volunteering) introduce alternative rhythms of participation grounded in community values.

Synchrony and well-being. These rhythms produce lasting effects only when they are synchronised with institutional rhythms. Synchrony fosters security, meaning, and agency, whereas desynchronisation generates tension, overload, and a loss of embeddedness. Hence the importance of rhythmic agency and temporal reflexivity as protective and emancipatory mechanisms that enable individuals not only to adapt to the rhythms of their environment but also to retune them in accordance with their values (Rosa 2013; Han 2015). From this perspective, well-being is understood as the dynamic synchrony of personal, community, and institutional rhythms - a state achieved through continuous reflection on time, values, and meaning (cf. Woś 2023a).

CONCLUSION AND DIRECTIONS FOR FURTHER RESEARCH

This article has developed a theoretical reflection on subjectivity through the lens of critical realism, focusing on the relationships between structure, agency, and social time. It proposes a rhythmic conceptual framework that combines critical realism with the concept of rhythm as a

temporal, meaning-generating structure, illustrated through data from the *Youth 4.0* project, treated as symptoms of the rhythmisation of values and agency. The analysis of three types of rhythm - progressive, stable, and regressive - shows that the synchronisation of individual and institutional rhythms fosters the development of reflexive subjectivity, whereas their disruption leads to alienation and the fragmentation of meaning. Rhythm, understood ontologically, constitutes a mediating structure between the social world and individual agency.

The paper's principal contributions include: (1) conceptualising rhythm as a mediator between structure and agency; (2) introducing four analytical categories - rhythmic chronostructure, rhythms of subjectivity, rhythmic agency, and temporal reflexivity; (3) developing a typology of chronostructures - progressive, stable, and regressive; and (4) proposing a model of rhythmic synchronisation as a condition for well-being and identity. The rhythmic chronostructure, understood as a rhythmic order of meaning, defines the space of possible individual action, enabling or constraining agency. Time, from this perspective, is not merely a backdrop to social processes but a constitutive element of the structure of action, organising experience and its meaning.

The rhythmic subject, endowed with reflexivity and agency, retains the capacity to reconstruct the rhythms of meaning even under conditions of chronodestruction, provided that appropriate axionormative resources and reflexive competencies are available. Similar phenomena are described by Bukowski and Kopczyńska (2025, 21-22), who argue that communication technologies can both strengthen and disrupt the rhythmicity of social life by imposing new temporal orders and forcing the renegotiation of the rhythms of meaning in education, work, and communication.

The proposed framework opens up three directions for further research:

1. Empirical - identifying rhythms of meaning in educational, biographical, and community practices;
2. Methodological - combining qualitative strategies (rhythm diaries, narratives, observations) with quantitative analysis in the spirit of triangulation;
3. Theoretical - placing the proposed framework in dialogue with the phenomenology of time, symbolic constructivism, relational sociology, and new materialism.

In this way, the article returns to the question posed at the outset concerning the role of social rhythms in the constitution of subjectivity. At the interpretive level, the findings contribute to a broader stream of research on the transformation of subjectivity in late modernity, which emphasises the tension between increasing reflexivity and the limited possibility of translating it into action. The proposed rhythmic framework extends these findings by highlighting the importance of rhythmic chronostructures as a condition for integrating reflexivity, agency, and meaning over time.

The integration of the proposed rhythmic framework with critical realism appears particularly promising, as it preserves a reference to real structures while simultaneously recognising the subject's reflexive agency. A rhythmic sociology of subjectivity combines reflection on temporality with theories of agency and social structure, offering a new interpretive framework for research on identity and social change. This model does not claim universality; rather, it is heuristic, drawing attention to the relationships between time, structure, and identity in late modernity. The rhythmic approach allows subjectivity to be understood as a dynamic process of synchronising meaning, time, and action - a process that constitutes both a challenge and an opportunity for the contemporary humanities and reflexive pedagogy.

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