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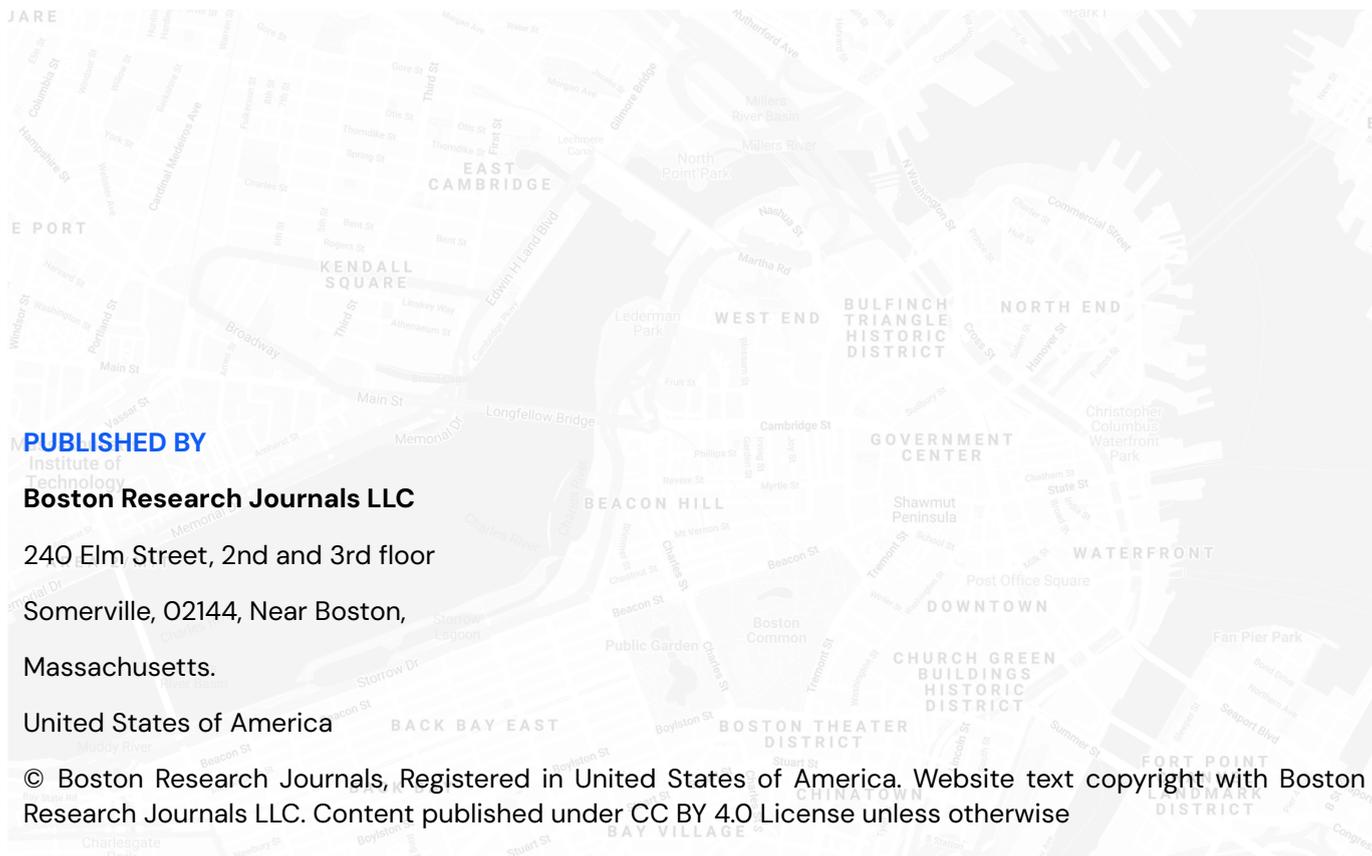
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## Peer-Reviewed Research Articles



# Impact of Economic Disparity on Democratic Values and Democratic Participation

Ms. Josephine Daisy<sup>5</sup>, Mr. Karthick<sup>6</sup>

## ABSTRACT

The study measures the impacts caused by economic disparity on democratic values and political participation of people and also examines the role of social media in shaping public perceptions of inequality and democratic engagement. This research will employ a quantitative approach to examine the impact of economic disparity on democratic values and political participation in rural areas of the Salem, Namakkal, Dharmapuri and Erode districts. The study used a structured interview schedule to collect quantitative data from a sample of 276 electoral residents in rural areas of these four districts. The study utilizes snowball sampling due to the challenges in identifying and contacting individuals in rural areas. This method is particularly suitable for exploring potentially sensitive topics related to economic inequality and political views. The sample size of 276 provides adequate statistical power for the planned analyses considering the expected effect sizes and desired level of precision. The Quantitative data will be analyzed using descriptive statistics, ANOVA, correlation and regression analysis to examine the relationships between economic background, democratic values, social media effects and political participation. The findings portray that the economic disparity and social media influence are having significant quantitative impact on the democratic values and participation among the electoral voters.

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## I. INTRODUCTION

The results of growing amounts of studies point to a complex link between economic disparities and the condition of democratic nations. With an eye on the part social media plays in this relationship, this study aims to examine the many ways in which economic disparity influences democratic values and political participation. The growing economic inequalities might compromise basic democratic values like fairness, equality of opportunity, and trust in institutions. When there are notable economic disparities, some may believe that the system is set against them. Disillusionment and political process disengagement may follow from this. Indices suggesting this phenomena could be under way include declining voter participation, less civic activity, and decreasing social cohesion. The results of the research show that even little disparity might lead a representative democracy to turn into an oligarchy, therefore posing issues about the equitable distribution of power. Economic differences might create rather significant obstacles to political process participation. Those that have fewer resources might not have the time, money, or understanding needed for active involvement to be effective. This might lead to a society in which the perspectives of the affluent are emphasized while those of those with less money are disregarded. Solt's (2008) paper provides further details on how differences in wealth lower political interest and opinions of government responsiveness. Though for some individuals digital media may make access more accessible, if it is not backed by policies that support good governance it might potentially aggravate already existing disparities. Social media channels have become increasingly important in order to shape public opinions about inequality and promote democratic participation. These platforms might therefore be used to spread false information, amplify extreme views, and increase society conflicts even while they have the ability to facilitate political mobilization and provide means for voices that are excluded to be heard. Media coverage of non-institutional digital platforms focuses on their ability to provide new means of engagement, therefore reshaping politics. These platforms also have challenges in terms of increasing their impact and optimizing their possibilities, however. The results of the study underline the need of social trust and system trust

in deliberative democracy, so using social media may both contribute to the continuation of trust issues and assist to cure them. Measuring the impact of social media on democratic processes depends on an awareness of how it shapes public discussion on inequality and impacts political behavior.

## II. LITERATURE ANALYSIS

The emphasis of this paper is differential participation in social movements. and helps to balance responses at the individual and systemic levels. The study assess three hypotheses generated from rationalist perspectives on individual engagement and social networks using survey data on members of a notable Swiss solidarity movement organisation. Evidence supports both points of view: people's social network integration as well as their own subjective assessments of certain engagement-related cognitive aspects affects their degree of participation. The two most crucial elements that can explain differences in participation are the confidence one has in the effectiveness of their own probable contribution and the chance of getting recruited by an activist (Passy, F., & Giugni, M. (2001))<sup>1</sup>. The model shows the interaction between at the individual level effects and socio-structural factors as well as the type of the conversation such the degree of exposure to ideas that vary from one's own. The study gathered a multitude of models created by local political communication experts to investigate the link between more systematic social factors and the activities often targeted at the individual level in political science. The study indicates that people's degree of political involvement is much influenced by the social setting in which they debate political concerns. The study reveals that the many points of view people encounter when discussing politics in corporate and religious networks significantly reduce the influence of these networks on political engagement (Scheufele, D. A., Nisbet, M. C., Brossard, D., & Nisbet, E. C. (2004))<sup>2</sup>. The study addresses this question in this study by use of data acquired from many worldwide polls of mature industrial democracies. It contrasts counterarguments stressing how inequality influences people's objective interests or their capacity to engage in politics with the presumption that the wealthy have greater influence in politics because of higher inequality. This research shows that everyone save the richest

people are far less engaged in politics, have fewer political dialogues and are less likely to vote when income inequality is high (Solt, F. (2008))<sup>3</sup>. The study examined ten-year study literature on citizenship, participation, and responsibility which was assessed using a non-random sample of 100 research articles on four categories of citizen engagement in twenty nations. The study used a meta-case study methodology which examined democratic and developmental outcomes that can be ascribed to citizen participation. The findings of this research have great influence on the funding and organisation of participatory projects aiming at raising the state's responsiveness and efficiency (Gaventa, J., & Barrett, G. (2010))<sup>4</sup>.

The study provides some basic principles for understanding coordinated, large-scale, personal collective action performed online. Driven by social fragmentation and the disintegration of collective loyalties, we live in a time of individualised politics. For many protest movements, individually expressive action frames have replaced group action frames. This trend is shown by the increasing mass, fast coordinated political involvement aiming at everything from parties and candidates to brands, businesses and international organisations (Bennett, W. L. (2012))<sup>5</sup>. There is ongoing debate about how much political consumption constitutes political behaviour. In their pursuit of a resolution to this debate, researchers have examined several criteria that may indicate political consumerism; nevertheless, they have failed to examine the communicative components of this tendency, especially in relation to digital media. Based on primary survey data from the United States, the study found that social media use mediates political consumerism and that the most direct connection between political consumerism and the Internet is civic engagement, not political participation (De Zúñiga, H. G., Copeland, L., & Bimber, B. (2014))<sup>6</sup>. The digital revolution has enabled notable changes in political life and many more avenues have opened for individuals to engage in political activity. Participatory politics is peer-based, interactive and driven by the will of the people unlike institutional politics, which is controlled by strong elites and institutions. This study offers a framework for comprehending these trends, measures the frequency and expansion of these new activities using a representative national survey, and suggests a more general agenda for civic education in the digital era by means of curricular reform models (Kahne, J., Hodgin, E., &

Eidman-Aadah, E. (2016))<sup>7</sup>. This study tested the relationship between online comedy and the dependent variables such public engagement and opinion leadership. They viewed a political stand-up comedy clip to get the treatment group's opinions on public engagement, critical thinking and opinion sharing. This study revealed that viewers of political comedy online were more likely to be politically active, critical thinker, and opinion sharer in a non Western developing country environment (Saxena, K., & Ofori-Parku, S. S. (2024))<sup>8</sup>. Digital technologies supporting media creation, creativity, critical thinking and teamwork may help close the gap between the reality of young people from all backgrounds and their experiences as citizens, thereby empowering and integrating them into the learning process. Participating in cooperative, immersive and participatory events based on consistent literature review approaches could help research teams. The study contributes to the continuing discussions on the urgent need to solve youthful social and digital exclusion for improved democratic involvement as well as the requirement of appreciating and embracing the many origins of young people using ideas like inclusive design and co-creation (Oliveira, A. F., Leote de Carvalho, M. J., & Sousa, C. (2024))<sup>9</sup>. This interdisciplinary research reviews the empirical material from the past quarter of a century in the domains of management and politics. Broadly speaking, job content, working environment, employment features and social contacts at work define work-related experiences. This research investigates how these elements interact with individuals' political involvement outside of their employment to include their participation, attitudes, trust and values towards politics. The study proposed more multilevel research, an emphasis on processes explaining particular events and a wider spectrum of theoretical viewpoints (Sharma, S., Kar, A. K., & Gupta, M. P. (2024))<sup>10</sup>. The extensive research will address the effects of ICTs on democratic processes and citizen engagement, specifically focussing on tools like social media, e-voting systems, e-government projects and e-participation platforms. This study explores the ways in which information and communication technologies have improved the efficiency, transparency, and quality of democratic engagement. The analysis of 46 peer reviewed publications published between 1999 and 2024 based on which the study identifies key concerns,

research gaps and potential solutions. Unfortunately, there is a lack of understanding about the long-term effects of ICTs on democratic governance, and the current legislative framework is not very good when it comes to protecting individuals' privacy and combating misinformation. Modern information and communication technologies (ICTs) may be both a boon and a bane to democratic processes (Asimakopoulos, G., Antonopoulou, H., Giotopoulos, K., & Halkiopoulos, C. (2025))<sup>11</sup>. The studies want to better understand the many aspects of DCE and how it increases involvement. Using structural equation modelling as part of a mixed method approach, the study looks at the relationships between e-participation, DCE, social and public accountability. The findings reveal that public opinion of e government initiatives is negative as officials seem to ignore them. The results of the research might be used by policymakers to design responsible e-government services that support increased e-participation by spotting certain facets of personal empowerment (Selenko, E., et.al. (2025))<sup>12</sup>.

### III. RESEARCH PROBLEM

The principles of economic inequality affect democratic principles and by extension political engagement is a complex issue that this research seeks to address. There is mounting evidence that economic disparity and democratic system health are interdependent. The studies by Andersen (2012), Kriekhaus et al. (2013) and Solt (2008) have seen a rise in wealth disparity, a fall in public faith in government and a corresponding decline in voter participation. This makes one wonder if economic inequality has the ability to erode democratic principles like justice, equality, and civic duty which are the bedrock of representative government. Political polarisation, disengagement from political processes and a decrease in social cohesiveness are some ways that democratic principles may be eroded (Rebechi & Rohde, 2022). In addition, those who are economically disadvantaged may not have the time, money or knowledge to actively participate in politics as they are struggling to satisfy their most fundamental requirements. This may exacerbate economic and social inequality by further excluding already-marginalized groups from political decision-making (Sakib, 2021). To build methods to fortify democratic institutions and encourage inclusive political involvement in an age of growing economic gaps, it is essential to comprehend the

complex ways in which one's economic background affects democratic principles and political activity. With the end objective of cultivating more equitable and resilient democratic societies, study seeks to add to this knowledge by investigating the particular ways in which economic disparity impacts democratic principles and political conduct. The link between economic circumstances and political involvement may be mediated by characteristics including social trust, views of government responsiveness and political effectiveness are major issues measured by the study.

### IV. RESEARCH QUESTIONS

What are the diverse impacts caused by differing economic background on democratic values and resultant impact on political participation of people? What is the role played by social media in shaping the perceptions of the people towards democratic engagement?

### V. SIGNIFICANCE OF THE STUDY

This study explores the intricate problem of how economic disparities influence democratic values consequently political participation. A growing body of research suggests a complex relationship between economic inequality and the health of democratic systems. The rising income inequality has been observed alongside declining public trust in political institutions and decreased voter turnout in many established democracies. This raises concerns about the potential for economic disparities to undermine the very foundations of democratic governance by eroding core values such as fairness, equality, and civic responsibility. This erosion of democratic values can manifest in various ways, including increased political polarization, disengagement from political processes and a decline in social cohesion. The economic hardship can create barriers to political participation, as individuals struggling to meet basic needs may have limited time, resources or access to information necessary for effective engagement. This can lead to a vicious cycle of disenfranchisement, where marginalized groups are increasingly excluded from political decision-making, exacerbating economic and social inequalities. The study provides an understanding about the multifaceted impacts of economic background on democratic values and political participation is crucial for developing strategies to

strengthen democratic institutions and promote inclusive political engagement in an era of widening economic divides. This research is significant which aims to contribute to this understanding by examining the specific mechanisms through which economic inequality affects democratic values and political behavior with the ultimate goal of fostering more equitable and resilient democratic societies.

## VI. OBJECTIVES

1. To examine the impacts caused by economic disparity on democratic values and political participation of people
2. To evaluate the role of social media in shaping public perceptions of inequality and democratic engagement

## VII. RESEARCH METHODOLOGY

This research will employ a quantitative approach to examine the impact of economic disparity on democratic values and political participation in rural areas of the Salem, Namakkal, Dharmapuri and Erode districts. The study will integrate diverse tools of quantitative data collection and analysis methods to provide a comprehensive understanding of the research problem. The study used a structured interview schedule to collect quantitative data from a sample of 276 electoral residents in rural areas of these four districts. The schedule will include items measuring economic background (income, occupation, and education), democratic values (support for free and fair elections, belief in equality), social media influence and political participation (voting, engaging in political discussions, participating in protests). The study focuses on rural areas within the four districts which is crucial to acknowledge the potential diversity in economic backgrounds and access to technology. The survey will incorporate questions designed to account for such diversity, including location-specific queries to ensure accurate representation of the target population's experiences. Snowball sampling will be employed due to the challenges of accessing geographically dispersed and potentially marginalized populations in rural areas. The study utilizes snowball sampling due to the challenges in identifying and contacting individuals in rural areas similar to studies conducted on healthcare workers in rural Ethiopia (Abetu & Amanu, 2020). This method is particularly suitable for exploring potentially sensitive topics

related to economic inequality and political views. The sample size of 276 provides adequate statistical power for the planned analyses considering the expected effect sizes and desired level of precision. The Quantitative data will be analyzed using descriptive statistics, ANOVA, correlation and regression analysis to examine the relationships between economic background, democratic values, social media effects and political participation.

## VIII. DATA ANALYSIS & INTERPRETATIONS

The section presents the analysis and interpretation of data collected through interviews among the electoral residents in the study area. Descriptive statistics summarize key variables related to political engagement practices and economic disparities among the sample. ANOVA correlation and regression analyses explore relationships between these economic disparities and their differential effects on demographic values, participation and social media influences.

Table 1: Economic Segmentation of Electoral Voters

Variables	Group	N	Percent
Gender	Male	175	63.40
	Female	101	36.60
	Total	276	100.00
Age	18 – 25 Years	30	10.90
	26 – 35 Years	81	29.30
	36 – 45 Years	109	39.50
	46 – 55 Years	56	20.30
	Total	276	100.00
Education	SSLC/HSC	17	6.20
	UG	147	53.30
	PG	77	27.90
	Diploma/Technical	35	12.70
	Total	276	100.00
Monthly Income	Below Rs. 20,000	40	14.50
	Rs. 20,001 – Rs. 30,000	91	33.00
	Rs. 30,001– Rs. 40,000	127	46.00
	Above Rs. 40,001	18	6.50
	Total	276	100.00
Occupation	Salaried	77	27.90
	Self Employed	92	33.30
	Technical	96	34.80

	Professional	11	4.00
	Total	276	100.00
Marital Status	Married	170	61.60
	Unmarried	102	37.00
	Others	4	1.40
	Total	276	100.00

(Source: Primary Data)

The data provides a comprehensive snapshot of the demographic and economic profile of electoral voters which can be used to analyze the impact of economic disparity on democratic values and democratic participation.

### IX. ECONOMIC DISPARITY AND DEMOCRATIC PARTICIPATION

- Income Distribution – The data reveals a clear income disparity among voters. While 46% of voters earn between Rs. 30,001–Rs. 40,000, a significant portion (14.50%) earns below Rs. 20,000, and only 6.50% earn above Rs. 40,001. This disparity may influence voter turnout and participation as lower income groups often face barriers such as lack of access to information, transportation or time to engage in democratic processes.
- Occupation – The majority of voters are employed in technical (34.80%) or self-employed (33.30%) roles with a smaller percentage in salaried (27.90%) or professional (4.00%) jobs. This suggests that economic policies targeting small businesses, technical workers and labor rights may resonate strongly with this electorate.

### X. EDUCATION AND DEMOCRATIC VALUES

- Education Levels– A significant majority of voters have at least an undergraduate degree (53.30%), with 27.90% holding postgraduate degrees. This indicates a relatively educated electorate, which is often associated with higher levels of political awareness and engagement. Educated voters are more likely to prioritize issues like transparency, accountability, and policy-driven governance.

Higher education levels may foster stronger democratic values, such as tolerance, inclusivity, and active participation. However, the presence of a small but notable group with only SSLC/HSC qualifications (6.20%) suggests a need for targeted efforts to ensure inclusive participation and understanding of democratic processes among less-educated voters.

### XI. AGE AND DEMOCRATIC ENGAGEMENT

The largest age group is 36–45 years (39.50%), followed by 26–35 years (29.30%). Middle-aged voters are often more politically active and have established economic and social concerns, such as job security, healthcare, and education for their children. Younger voters (18–25 years) make up only 10.90% of the electorate, which may indicate lower engagement among this demographic, possibly due to economic instability or disillusionment with the political system.

### XII. GENDER AND MARITAL STATUS

Males constitute 63.40% of the electorate, while females make up only 36.60%. This gender gap may reflect broader societal inequalities that limit women's participation in democratic processes. Addressing barriers to women's participation, such as safety, mobility, and cultural norms, is crucial for fostering inclusive democracy.

### XIII. MARITAL STATUS

Married individuals make up 61.60% of the electorate, which may indicate that family-oriented policies could have a significant impact on voter behavior.

**XIV. ECONOMIC DISPARITY AND POLICY PRIORITIES**

The opinions reveal that economic policies addressing middle-income and lower-income groups will be critical for engaging the majority of voters.

**Table 2:** Social Media Exposure of Electoral Voters

Variables	Group	N	Percent
Social Media Usage for Information Seeking	High	152	55.10
	Medium	65	23.60
	Low	59	21.40
	Total	276	100.00
Political Opinion Expression in Social Media	High	181	65.60
	Medium	68	24.60
	Low	27	9.80
	Total	276	100.00
Political Discussion in Social Media	High	48	17.40
	Medium	182	65.90
	Low	46	16.70
	Total	276	100.00
Exposure to Various Political perspectives	High	90	32.60
	Medium	166	60.10
	Low	20	7.20
	Total	276	100.00

The data presents an inclusive analysis of electoral voters' social media exposure measuring the various aspects such as social media usage for information seeking, political opinion expression, political discussion, and exposure to various political perspectives.

**XV. SOCIAL MEDIA USAGE FOR INFORMATION SEEKING**

A significant portion of voters (55.1%) use social media for information seeking at a high level, followed by 23.6% at a medium level, and 21.4% at a low level which informs that more than half of the

voters rely heavily on social media for political information.

1. Political Opinion Expression in Social Media:

The majority (65.6%) of voters express their political opinions on social media at a high level, while 24.6% express opinions at a medium level, and 9.8% at a low level which reveals that social media is a prominent platform for political expression among electoral voters.

2. Political Discussion in Social Media:

Most voters (65.9%) engage in political discussions on social media at a medium level, while a smaller portion participates at high (17.4%) and low (16.7%) levels which suggests that while political discussions occur frequently on social media, the majority of voters engage in moderate levels of interaction.

3. Exposure to Various Political Perspectives:

A majority of voters (60.1%) are exposed to various political perspectives at a medium level, with 32.6% experiencing a high level of exposure, and only 7.2% exposed at a low level which explains a diverse exposure to political viewpoints on social media, although the intensity of this exposure varies.

**Table 3:** Variance Effects of Social Media Exposure on Democratic Values and Democratic Participation

	Sig Value		
	Political Opinions Expression in Social Media	Political Discussion in Social Media	Exposure to Political Perspectives
Fair and Free Elections	<0.001**	0.021*	<0.001**
Government should be accountable to people	0.003**	<0.001**	<0.001**
Freely Express their opinions	0.009**	<0.001**	<0.001**
Diversity of Opinions are Valued	0.019*	0.004**	0.003**
Respect to the rights of minorities	0.002**	0.024*	<0.001**
Balances to prevent abuse of power	0.0036*	<0.001**	<0.001**
Peaceful protests to express dissent	0.001**	<0.001**	0.009**
Higher Frequency of Voting in Elections	0.011*	<0.001**	<0.001**
Discussion of Politics with Others	0.041*	0.032*	<0.001**
Participation in Political Campaigns	<0.039*	<0.001**	0.011*
Contact Election Officials for Clarifications	0.012*	<0.001**	<0.001**
Volunteer in Political Activities	<0.001**	<0.001**	<0.001**
Sign Petitions for Public Issues	0.007**	0.005**	<0.001**

(\*\* - Highlights relationship @ 1% level & \* - Highlights relationship @ 5% level)

The evaluation based on the social media exposure towards the democratic participation and uplifting of democratic values using the variance analysis reveals significant difference in relationship between social media exposure and numerous indicators of political participation. With very significant p-values, there is a vital relationship between the expression, debate and exposure to political viewpoints and the belief in free and fair elections. There are also correlations between social media use and views on government transparency, free speech, and minority rights. There were statistically significant findings for all three variables, indicating that those participating in political speech and conversation on social media really appreciate diversity of thought. The support for a system of checks and balances to avoid the misuse of power is also associated with the speech, debate and exposure of political opinions. Expression, debate and exposure of political opinions, as well as involvement in political campaigns as well as communication with election authorities are impacting the frequency of voting in elections. There is a strong relationship between social media exposure and political activism including petition signing and volunteer work. The results show that people's exposure to social media has a significant impact on their political involvement, attitudes and behaviours. It also affects their participation in elections, the quality of political discourse and their support for democratic values

Table 4: Partial Correlation – Economic Disparities and Demographic Participation

Control Variables			Fair and Free Elections	Government should be accountable to people	Freely Express their opinions	Diversity of Opinions are Valued	Respect to the rights of minorities	Balances to prevent abuse of power	Peaceful protests to express dissent
Economic Disparities	Fair and Free Elections	Correlation	1.000						
		Significance (2-tailed)	.						
	Government should be accountable to people	Correlation	.464	1.000					
		Significance (2-tailed)	.000	.					
	Freely Express their opinions	Correlation	.120	.122	1.000				
		Significance (2-tailed)	.047	.044	.				
	Diversity of Opinions are Valued	Correlation	.137	.115	.337	1.000			
		Significance (2-tailed)	.023	.057	.000	.			
	Respect to the rights of minorities	Correlation	.233	.149	.326	.430	1.000		
		Significance (2-tailed)	.000	.013	.000	.000	.		
	Balances to prevent abuse of power	Correlation	.058	-.001	.367	.325	.233	1.000	
		Significance (2-tailed)	.337	.990	.000	.000	.000	.	
	Peaceful protests to express dissent	Correlation	.023	-.107	.367	.328	.177	.436	1.000
		Significance (2-tailed)	.701	.075	.000	.000	.003	.000	.

The outcome of partial correlation shows correlations between "Economic Disparities" and various measures of democratic participation. It appears "Fair and Free Elections" is positively correlated with the belief that "Government should be accountable to people" (correlation = .464,  $p < .000$ ). This suggests that individuals who perceive elections as fair and free are also more likely to believe in government accountability. Similar positive correlations, albeit weaker, exist between "Fair and Free Elections" and other democratic values such as "Freely Express their opinions," "Diversity of Opinions are Valued," "Respect to the rights of minorities," and "Balances to prevent abuse of power." These findings align with general theories of democratic participation which emphasize the importance of free and fair elections as a foundation for other democratic principles. It would be beneficial to examine other potential influences on these perceptions, such as socioeconomic factors, education levels, and access to diverse information sources, particularly since your data specifically mentions "Economic Disparities." Further analysis, controlling for other relevant variables, would be helpful in understanding the complex interplay between these factors and democratic participation

**Table 5:** Regression – Model Estimates – Impact of Economic Disparity & Social Media Influence on Democratic Values

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	ANOVA Fit Model	
1	0.789	0.696	0.093	0.51379	0.007**	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.459	0.104		14.056	<0.001* *
	Economic Disparity	0.393	0.032	0.174	2.930	0.004**
	Social Media Influence	0.171	0.052	0.081	1.961	0.017*
a. Dependent Variable: Democratic Values						

The regression model analyzes the impact of "Economic Disparity" and "Social Media Influence" on "Democratic Values." The model demonstrates a statistically significant relationship between the independent variables and the dependent variable, indicated by the ANOVA result (F-statistic p-value = 0.007). The R-squared value of 0.696 indicates that the model explains approximately 70% of the variance in "Democratic Values." Both "Economic Disparity" and "Social Media Influence" have positive and statistically significant effects on "Democratic Values," as indicated by the positive coefficients and p-values less than 0.05. Specifically, the model suggests that an increase in "Economic Disparity" is associated with an increase in "Democratic Values" (coefficient = 0.393, p = 0.004). Additionally, an increase in "Social Media Influence" is associated with an increase in "Democratic Values," although the effect is smaller (coefficient = 0.171, p = 0.017). The relatively small size of the social media coefficient is likely due to the multi-faceted and sometimes contradictory role social media can play in political discourse.

**Table 6:** Regression –Model Estimates

Impact of Economic Disparity & Social Media Influence on Democratic Participation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	ANOVA	
1	0.691	0.655	0.048	1.13532	<0.001**	
Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.660	0.229		7.240	<0.001**
	Economic Disparity	0.242	0.070	0.135	3.597	0.035*
	Social Media Influence	0.573	0.116		287955	<0.001**
a. Dependent Variable: Democratic Participation						

This regression model examines the impact of "Economic Disparity" and "Social Media Influence" on "Democratic Participation." The model explains a substantial portion of the variance in democratic participation, as indicated by the adjusted R-squared value of 0.655. The coefficient for "Economic Disparity" (0.242,  $p = 0.035$ ) suggests a positive relationship with "Democratic Participation." It is also possible that in certain contexts, economic disparities can mobilize specific groups to participate more actively in political processes. The coefficient for "Social Media Influence" (0.573,  $p < 0.001$ ) is also positive and larger, suggesting a stronger influence on democratic participation. This finding aligns with the growing body of research exploring the role of social media in political mobilization and engagement. The increased accessibility and ease of online communication offered by social media platforms can facilitate political discussions, information sharing, and collective action, potentially boosting democratic participation.

## XVI. DISCUSSION AND CONCLUSION

The study showed a significant degree of participation for information seeking and opinion expressing was found by the percentage study of social media use among election voters. A possible preference for passive consumption over active argument may explain the significantly lower degree of involvement in democratic participation. This research is needed to determine the effects of exposure to multiple political ideas on reducing the prevalence of filter bubbles and encouraging real dialogue between people with different opinions, even when such perspectives are already available. The results of the study reveal there is a positive relationship between the belief in government responsibility and the perception of free and fair elections. Consistent with democratic theory, which holds that free and fair elections are essential to a democratic government, this result supports that view. There is strong evidence that democratic ideals are interdependent on one another, as free

and fair elections are positively correlated with other democratic characteristics.

A more sophisticated understanding of the relationship between the variables under study was revealed by the regression analysis. Democratic principles are favourably affected by economic inequality and the influence of social media, according to the first regression model. Although it may seem paradoxical, there is a favourable correlation between economic inequality and democratic principles. Although studies have shown that economic inequality weakens democracies, it's also possible that certain people might be galvanised by a desire for change or more equality and engage with democratic principles. As a medium for political discourse and organisation, social media has a constructive impact on democratic principles. Economic inequality and the impact of social media were shown to have a positive relationship with democratic engagement in the second regression model. While economic disparity may prevent some from becoming involved, it may also inspire others to fight for fair treatment in politics. Social media has shown to be an effective instrument for mobilisation and engagement, as seen by its considerable positive impact on democratic participation. Social media's simplicity of use in communicating and sharing information online may give people a voice in political processes.

This study reveals how the digital era has many different effects on democratic principles and engagement. An influential new force is emerging in the realm of politics: social media. While it opens people up to new ideas and encourages them to share their own, it also raises concerns about fake news and online filter bubbles. The inequality might make it harder for certain people to participate in democratic processes, but on the other it can inspire others to become involved. The precise processes by which social media affects democratic principles and engagement should be the subject of future study that accounts for these intricacies across a variety of demographic groupings. It is equally important to study the effects of various social media behaviours on democratic results, such as taking part in online debates vs. just watching political videos. The study portrays that the economic disparity and social media influence are having significant impact on the democratic values and participation among the electoral voters.

## XVII. REFERENCES

1. Passy, F., & Giugni, M. (2001). Social networks and individual perceptions: Explaining differential participation in social movements. In *Sociological forum* (Vol. 16, pp. 123–153). Kluwer Academic Publishers–Plenum Publishers.
2. Scheufele, D. A., Nisbet, M. C., Brossard, D., & Nisbet, E. C. (2004). Social structure and citizenship: Examining the impacts of social setting, network heterogeneity, and informational variables on political participation. *Political Communication*, 21(3), 315–338.
3. Solt, F. (2008). Economic inequality and democratic political engagement. *American journal of political science*, 52(1), 48–60.
4. Gaventa, J., & Barrett, G. (2010). So what difference does it make? Mapping the outcomes of citizen engagement. *IDS Working Papers*, 2010(347), 01–72. Bennett, W. L. (2012). The personalization of politics: Political identity, social media, and changing patterns of participation. *The annals of the American academy of political and social science*, 644(1), 20–39.
5. De Zúñiga, H. G., Copeland, L., & Bimber, B. (2014). Political consumerism: Civic engagement and the social media connection. *New media & society*, 16(3), 488–506.
6. Kahne, J., Hodgin, E., & Eidman–Aadahl, E. (2016). Redesigning civic education for the digital age: Participatory politics and the pursuit of democratic engagement. *Theory & Research in Social Education*, 44(1), 1–35.
7. Saxena, K., & Ofori–Parku, S. S. (2024). 'Funny'Politics: Stand-up Political Comedy, Public Engagement, Critical Thinking, and Opinion Sharing in India. *Journal of Creative Communications*, 19(3), 350–365.
8. Oliveira, A. F., Leote de Carvalho, M. J., & Sousa, C. (2024). Young People's Diversity and Digital Media: A Systematic Review (2010–2022). *Media and Communication*, 12.
9. Sharma, S., Kar, A. K., & Gupta, M. P. (2024). Untangling the web between digital citizen empowerment, accountability and quality of participation experience for e–government: Lessons from India. *Government Information Quarterly*, 41(3), 101964.
10. Asimakopoulos, G., Antonopoulou, H., Giotopoulos, K., & Halkiopoulos, C. (2025). Impact of Information and Communication

- Technologies on Democratic Processes and Citizen Participation. *Societies*, 15(2), 40.
11. Selenko, E., Schilbach, M., Brieger, S. A., Van Hootegem, A., & De Witte, H. (2025). The political consequences of work: an integrative review. *Journal of Management*, 01492063241301337.
  12. Islam, M. M. (2025). Impact of social media in Political Participation (2010– 2020): A Study on Students of Public Universities of Bangladesh (Doctoral dissertation, © University of Dhaka).
  13. Bhattacharya, U. (2024). Exploring Student Political Engagement: Perceptions and Participation at Delhi University's North Campus. Available at SSRN 4840452.
  14. Bhattacharya, U. (2024). Exploring Student Political Engagement: Perceptions and Participation at Delhi University's North Campus. Available at SSRN 4840452.
  15. Xing, Y., Zhang, J. Z., Storey, V. C., & Koohang, A. (2024). Diving into the divide: a systematic review of cognitive bias-based polarization on social media. *Journal of Enterprise Information Management*, 37(1), 259–287.
  16. Xie, P., Zhang, Y., Chen, R., Lin, Z., & Lu, N. (2024). Social media's impact on environmental awareness: a marginal treatment effect analysis of WeChat usage in China. *BMC Public Health*, 24(1), 3237.
  17. Zadra, M. F. (2024). The EU migrants political participation at the local level in post-brexit England: A comparative analysis of the institutional effects in four local authorities (Doctoral dissertation, University of Southampton).
  18. Otuya-Asohro, E. O. (2024). Social Media as A Viable Tool for Curbing the Menace of Political Apathy in Nigeria. *Emergence of Social Media: Shaping the Digital Discourse of the Next Generation*, 105.

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# Neural circuits: $\Sigma(35-59)$ artificial sound environments interconnected to an evolving autocentric rotating cellular cube

Dimitri Voudouris<sup>5</sup>

## ABSTRACT

Constructed by using multiple computer-fragmented WAV files retrieved from disposed digital audio data. 68 modular circuits and three ports each equipped with electronic grids, were developed. The action outcomes of each circuit are controlled by command processing, 24 partitions of an evolving rotating cube with 576 cellular blocks. Attached to each cell are wavelets, one to four plugins and a similar number of effects or a combination of both. The automaton tends to evolve from an initial random distribution of a selection of circuits, WAV files, effects and plugins to a deterministic selection of numbers used in further fragmentation processes of circuit-processed WAV files allowing accessibility in the distribution state so that wavelets can reach their destination. Circuits are part of the neural network of commands, offering machine learning capabilities. The development draws on transition adapted for modelling purposes in areas from physical and biochemical sciences

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## I. INTRODUCTION

'Self' and 'creation' reflect on the ability of a system to reproduce itself, or to produce and maintain itself by creating its parts; this phenomenon is applied to organic systems. In

electronic modular circuitry, the life of a system is located neither inside an object nor inside a process, but inside the oscillation between processes; objects depend on a manner of time that cannot be computed within a singular universal time. A cascade of signals and signal modulations is

generated. The kinetic objective of modulation is discovering the various natures, tensions, sound collisions, deformations and formations of electronic processes, and components with different speeds and latencies, forming an artificial electronic ecology. The selections from circuit selections, the 24 elementary cubic positions (faces) and cubic intracellular kinetic motions are determined by probability and programmed using MATLAB and C++.

#### 1. Reflections on soundscape, sound environment and biological processes

The soundscape differs from the sound environment because it emphasises the interaction between humans and sound sources in the background and the sound environment's perception, understanding and feedback reconstruction. Different sound sources in this context have varying impacts on subjective human experiences. Humans differ considerably physiologically in their knowledge, education, coding and decoding state. We can say that sounds from natural, mechanical and artificial sources have dualistic natures. Natural sounds enhance or mar stress and influence cognitive states and feelings of well-being. Mechanical sounds, conversely, affect hearing and are detrimental to stress recovery, leading to positive or negative emotions and stimulating antisocial or social behaviour. Artificial sounds, being more complex, can have both positive and negative effects on soundscape perception, depending on the environment and the specific sound source.

#### 2. Sonic expressions and interactions

Building modular circuits and creating an autonomous sustainable esoteric computer environment partially free from human intervention independent of human universal control, mismatching components (voltage or impedance) resulting in one component influencing the other so that signals are created at many points within the circuits once activated, the instability of partial connections within the network incited oscillations of diverse character, triggering a cascade of signals and signal modulations composing itself from within. The sonic expression of multiple components creates an interactive relationship between the listener and space, all within the circuitry.  $\Sigma(35-59)$  comprises 17 segments centred around the rules imposed by the rotating cube, cross-port transfer communication between

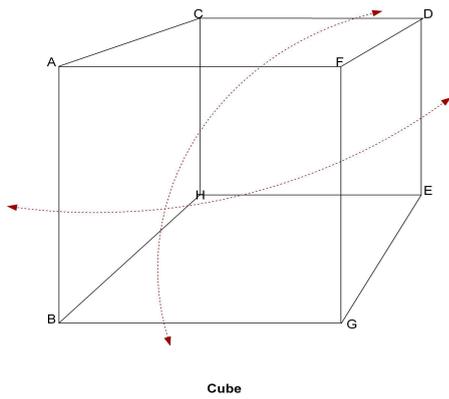
wavelets, plugins, and effects occurs. An external observer measures each segment through the point of failure or success.

#### 3. The electronic grid

Circuits are represented with three sound grids. The grids are coded to allow permeability access to WAV files according to their size and duration Fig.8 File Size = (Sample Rate x Number of Channels x Bits per Sample / 8) x Duration in Seconds + Overhead (around 100 bytes). Allowing activity in port1 (macro), port2 (meso), and port3 (micro) environments as they change and develop over time. Perspective shows us how wavelets introduced into the circuit coexist, react, replicate, and undergo morphological and physiological changes as they pass through the grids. The composition aims to transform an artificial to an "organic" related environment, drawing from chemical reactions. Proposed by enzymes, which are biological catalysts, are proteins in organic matter that help speed up metabolism, or the chemical reactions in our bodies. They build some substances and break down others. The molecules upon which enzymes may act are called substrates, and the enzyme converts the substrates into different molecules known as products. Anabolic enzymes catalyze biochemical reactions that synthesize larger complex molecules from smaller units using energy in ATP. Catabolic enzymes catalyse biochemical reactions that break down larger complex molecules into smaller units. Both reactions release energy and generate ATP.

#### 4. The nature of a rotating cube

Cellular blocks in the cube influence the movement and positioning of other cells, their attachments, fragmentation and transfers are triggered as an event is generated through modulation within each port. Each evolving rotation of the cube shows a calculated representation of the three ports displayed on the screen.

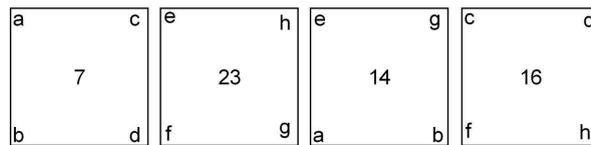


**Fig 1:** 4 diagonals, 8 vertices, and 6 faces. G symmetries of the cube, proposition:  $|G| = 24$  elements or positions. 24 is  $4!$  (factorial) therefore  $4! = |S_4|$  (symmetric group over 4 elements)

	1	2	3	4
A				
B				
C				
D				
E				
F				

**Fig 2:** 24 cellular blocks in a partition representing 1 of 24 elementary cubic positions

Rules for elementary positions:



**Fig 3:** A rotating cube with 4 out of 24 cellular faces (positions) a,b,c,d,e,f,g,h could have 1,2,3 or 4 plugins and effects per cell (maximum of 4 or minimum 0). Each of the 4 different value adjustments is unique to each module; the values assigned to each are determined by probability.

### Towards a microenvironmental order

The model of computation has some profound advantages over the rotating model because calculations can be done in a massively parallel fashion. All the 24 positions in each cell can compute their state through the flow of electric current between them. The minimum and maximum voltage threshold values characterise the cellular state, with addition of two resistors R1 and R2 and a capacitor (c) in an electric circuit, Kirchhoff's laws deal with the flow of current and voltage fluctuation in the system. Changes in cell membrane potential results in either polarization (alignment of electric dipoles, molecules with separated positive and negative charges) and depolarization (decrease in membrane potential) occurring. The cells do not rely on or change shared global information.

P326	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3
1								<b>4</b>					<b>1</b>		
2			<b>7</b>	<b>8</b>						<b>6</b>			<b>5</b>		
3	<b>9</b>		<b>11</b>			<b>10</b>					<b>11</b>				
4			<b>15</b>					<b>16</b>					<b>13</b>	<b>14</b>	
5				<b>20</b>	<b>17</b>		<b>19</b>		<b>17</b>	<b>18</b>					
6								<b>24</b>	<b>21</b>		<b>23</b>		<b>21</b>		
7							<b>3</b>							<b>2</b>	
8				<b>8</b>	<b>5</b>		<b>7</b>	<b>8</b>						<b>6</b>	
9	<b>9</b>								<b>9</b>		<b>11</b>		<b>9</b>		
10			<b>15</b>							<b>14</b>				<b>14</b>	
11	<b>17</b>						<b>19</b>			<b>18</b>					<b>19</b>
12		<b>22</b>	<b>23</b>		<b>21</b>				<b>21</b>			<b>24</b>			

Fig 4: 8 cube rotations the outcome result is 8 partitions with 24 cells, unique bold, coloured numbers each attached with (circuit/s, wavelets, plugins and effects) are assigned to each port

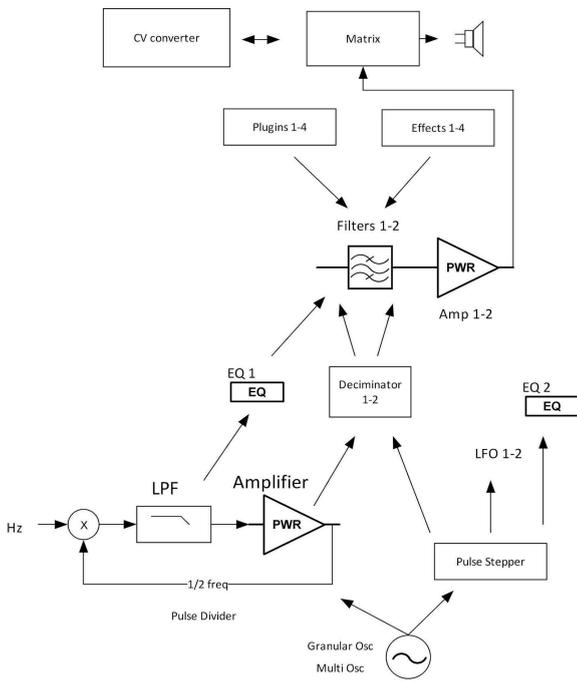
### Simple random process selection of wavelet

The simple random (systematic, stratified, cluster, multiphase) process expresses an uncertainty in the modelling process. In biological systems the process not only brings fragility to natural systems but is forced to redirect its processes this will also occur with machine learning e.g. A gradual course of events within a process that happens along the path A1, C3, L8, D4, is forced to redirect the path to C2, Q9, L6-8, S3 with a few similarities but different outcomes in biological systems e.g. An adult male sustained a head injury and lost his sense of taste, eighteen months later the man had recovered his taste sensations but had a list of alterations regarding taste compared to prior the accident. The process of nerve restoration redirection was similar, yet not the same.

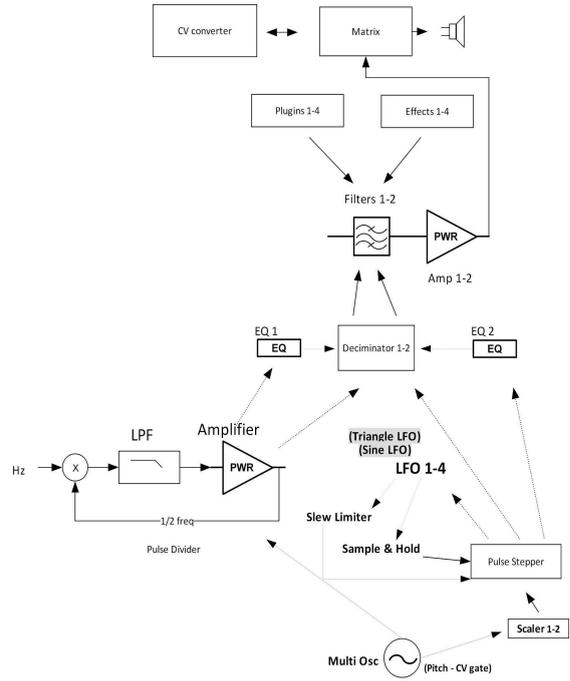
screen. The time allowed to activate the process is 30 seconds. Exceeding the time frame selects six numbers, two per port. Selecting and not exceeding the time frame, the screen changes colour to green, and splits numbers into three port partitions on the screen. The process repeats itself and continues to generate new number combinations.

### Circuits

The positions in Fig.4 are numbered in bold red = circuit selection for (port 1), bold yellow = circuit selection for (port 2), bold white = circuit selection for (port 3). The cells are selected at random. Each number may have one or two circuits attached to it. Activating the number triggers the opening of a descriptive diagram together with its active circuit. The selected numbers appear on a

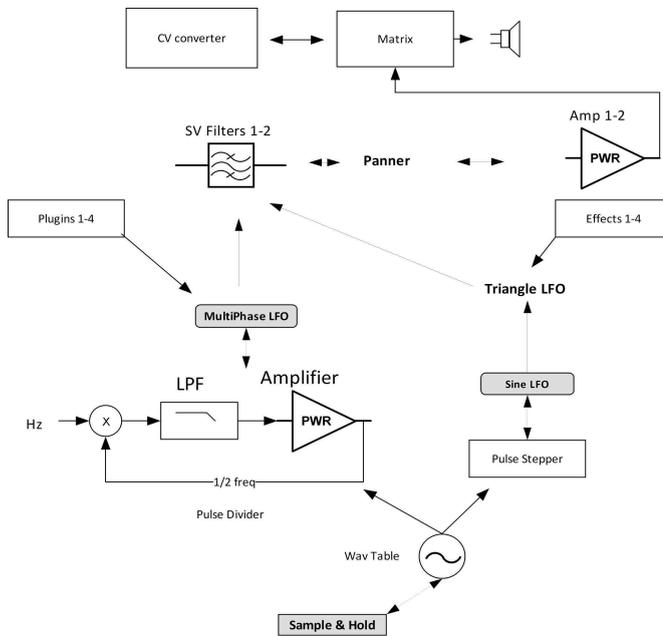


Circuit: 42



Circuit:43b

Fig 5: circuit diagrams: Segment - 9 (42) and 3 (43b)



Circuit:55

Fig 6: circuit diagrams: Segment - 15.5 (55)

**Plugins and effects**

Attached to each cellular (block) are between 1,2,3, or 4 Plugins/effects. Constantly changing the number of activation cells per partition shows permanent inactive, temporary inactive and active cell colouration. The circuit chosen has 1-4 plugin/effect attachments. The performer cannot replace the attachments with other plugins/effects, but could deactivate some or all of the plugins and effect attachments. If the selected number flashes, it indicates the cancellation of one or more attachments, and other selections are allowed. The following plugins and effects are used in this process: Plugins: Filters – 1 Pole – low and high pass, band pass, 2 Pole – low and high pass, band pass, notch. 4 Pole –low and high-pass.6 Pole – low pass. Envelope – Dbd, Flexible, ADHSR. LFO(S) – Sine, triangle, rectangle, saw tooth, random, multi. Effects: Natural reverb, distortion, compression, saturation.

Port 1		Port 2		Port 3	
Plugins	Effects	Plugins	Effects	Plugins	Effects
Envelope ADHSR	Compression	Filter -2 Pole – low/high pass, band pass		LFO(S) rectangle, saw tooth	Natural reverb
LFO(s) Random/multi	Distortion	Envelope FLEXIBLE	Saturation	Envelope -Dbd	Compression
Filter -1 Pole – low/high pass		LFO(S) – Sine, triangle Filter - 4 Pole –low/high-pass		Filter – 6 Pole – low pass	

Fig 7

**Wav files**

Each WAV is filed in folders, named according to category descriptive terminology; timbre, pitch, duration and size, and is selectively assigned to each port. A pseudo-random number generator determines the probability of choosing WAV numbers. The numbers selected appear on each three of the port screens. After circuit processing, the wavelet returns to the cube to be transferred to another port location, passing through the grids. The grid environments representing the macro,

meso, and microstructures gradually become smaller and impermeable to particular wavelets (fig.8 and fig.9). Failure to change the processing status of a WAV file reaches a state of impermeability to the grid and cannot be transferred to other ports. Processed WAV files awaiting transfer are returned to illuminated partition of cells in the cube having the inscription, segment number (Sn), and the (file name) together with port number- to and from (Pfn and Ptn), which gives the wav file primary status for transfer to take place and to meet grid duration and size

specifications to be allowed transfer access in other ports. WAV files that do not meet the size and duration specifications are transferred to the nearest neighbouring white cells to undergo fragmentation the inscription partition, donor and receiving cell numbers are added and appear on the screen (fig.10 and fig.11), when the process is triggered the cell becomes active and temporarily inactive when the process is complete. The neighbouring donor cell remains immobile next to the receiving white cell, when fragmentation is complete the white cell illuminates, the WAV file is returned to the donating cell to be transferred and mobility is restored, there is constant exchange of information between ports. WAV files not selected (fig.10) by the random number generator are returned to the parent port. The performer can observe the fragmentation process on screen and interfere by stopping procedure 1 and procedure 2 in stages 2, 3, 4 or 5.

Port	Duration	Wavelet size
1	16 -32 sec	2.82MB – 5.65 MB
2	8 – 15 sec	1.41MB – 2.65MB
3	250 ms – 5 sec	44.1kB – 1.06kB

Fig 8

The sourced WAV fragments are introduced to an analytical selection process, which is reshuffled by inversion, insertion, duplication, translocation or deletion. Some are involved in other programmed processes, such as displacement into ports, which occur spontaneously and are positioned in the sound construction, contributing to a certain diversity of environments, particularly in macro, meso and microstructure. The fragment rearrangement can be mediated by general recombination between homologous sequences or by various specialised recombination mechanisms grouped into transposition and conservative site-specific recombination. The two groupings are related, having fundamentally distinct processes with different outcomes. The features reflect the physical nature of each fragmented component, the state and structure of the environment, and the variations in complexity along a continuum from basic attributes (e.g. frequency components) to

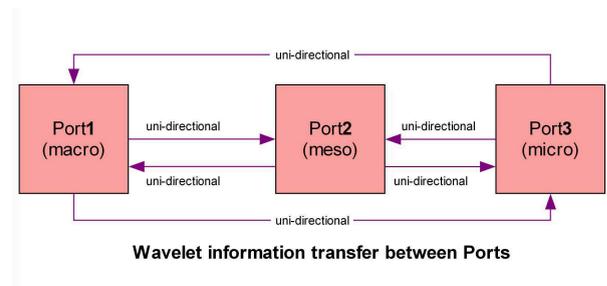


Fig 9

more complex characteristics of the scene (e.g. timbral profiles). Segregation is modelled using feature analysis that maps the process into building blocks ranging from simple (fragmented) components separated according to frequency, duration, dynamics, amplitude, size of wavelet and timbral components grouped in one mechanism of various non-related categories to a source of extraction. Groupings effectively capture the interdependencies between object attributes and learn their mapping onto an integrated representational space. Scene analysis depends on two key components: (i) obtaining a rich and robust feature representation that can capture object-specific details present in the scene; (ii) grouping feature elements such that their spatial and temporal associations match the dynamics of objects within the scene.

## Fragmentation

Programming in the computational software MATLAB allows for finding patterns within groupings. The separation of information, elements of sound data, is the cause of WAV files needing assistance with transfer requirements. The software executed non-deterministic computational tasks referring to Gaussian probability density functions, pitch analysis probability and continuous probability. Partially developed WAV files (each from the identified positions) were organised into bundles in files to folders with a linear time restriction between 6 - 48 seconds, and are identified for analysis. The selection of fragments underwent segregation, extraction, editing, and fusion as a final fundamental constructive approach. The sound synthesis explores the movement of simple and complex patterns amongst other parameters and draws heavily on concepts from the biological sciences and mathematics.

Procedure -1 (the use of PRNG in the selection process)

The use of a pseudo-random number generator (PRNG) referring to an algorithm that uses mathematical formulas in Matlab to produce sequences of random numbers selecting WAV fragments from files (see fig:10) in a folder, allowing calculation of a given set of numbers per file: mean value (1-12) or from split data (the values that produce the lowest amount of error between data 1-6 and 8-12), the variance values of split data (is the expectation of the squared deviation of a random variable from its mean) and the variance of the combined or pool sets (is the expectation of the squared deviation of a random variable from its mean when combining two sets of data). A position in the construction of the composition selected by the composer is introduced to the software program, requiring WAV files from the area with similar coded (35.3kB - 1.24MB) size and (200 ms - 7sec) duration, timbre, pitch and intensity to proceed further.

Files in folders consisting of a minimum of 5 and a maximum of 50 WAV fragmented data files.

Consecutive integers undergo non-deterministic computational tasks with PRNG.

Each file contains 2 subordinate files, file (a) with fragmented WAV files and (b) with non-selected

WAV files which could be used further down the selection chain (see fig. 1).

PRNG produced integers 3,7,7,10, of which 7 is duplicated and eliminated, and the non-selected WAV files 3,10 are placed in file 23b, referred to as the first step.

PRNG is re-applied to 4 separate processes to split WAV files 1-2, 4-6, 8-9 and 11-12. This produces four integers 2,4,8,11, that can be used in Procedure 2, referred to as the second step.

In Procedures 2 and 3, the stochastic fragmentation model describes the fragmentation phenomenon for an infinite particle system characterised by its size, which at some random points in time splits into two separate particles. A partitioning algorithm is used (in both groupings), the sequence of repetitions determined resulted in various orders of selective positioning of sound file segments that had similarities in size and duration but were morphologically different in density and pitch. Many sound file segments are arranged into infinite clusters, each with a density of clusters of each size. The finite volume model has many particle segments arranged into clusters, where coalescence and fragmentation of clusters occur randomly. The process of a finite system is defined by the ability of the system size to converge to the infinite volume equivalent. Coalescence-fragmentation and cluster formations will add to this complex system with negative or positive possibilities; it is for the composer to decide which path to follow.

Procedure - 2 (an artificial process of selecting/splitting/assembling)

1] The WAV fragment followed a process of analysis and suggestions in selecting, splitting and assembling sound fragments, resulting in the formation of larger or smaller fragments of (size and duration).

2] (fig:11) a) Selection of areas representing the foreground sound object/s and background sound environment undergo fragment 11, area (Z) undergoes extraction consisting of two sub-areas (Z1) foreground object/s and (Z2) background environment sound. WAV fragment 2, area (C) undergoes extraction consisting of two sub-areas (C1) foreground object/s and (C2) background environment sound.

3] Fusing sub-areas (Z1 + C2) of WAV fragments produces a larger fragment (size, duration) (ZC3a) and (ZC3b) of (a larger size, equal duration) to the original fragments Z1 and C2 combined. Fragments (Z2 + C1) produce a fragment of (larger size, duration) (CZ4a) and a fragment (CZ4b) of (larger size, equal duration) to the original fragments Z2 and C1 when combined.

4] Fusing sub-areas (Z2 + C2), the WAV fragments produce a larger fragment (size, duration) (ZC5a), and (Z1+C2), the audio fragments produce a larger fragment (ZC5b) of (larger size and duration) than the original fragments Z1 and C2 combined. Sub-areas (Z1+C1) produce a fragment of (larger size and duration) (CZ6a), and (Z2+C1) produce a fragment of (larger size and duration) (CZ6b) to the original fragments Z2 and C1 when combined.

Procedure - 3 (an organic process of selecting/splitting/assembling)

The procedure prohibits selection in subordinate file b, allows selection to take place in file a (see fig.10: Procedure 1), the composer chooses certain areas in the construction where the emphasis of "organic executions" needs to be met. Three steps in the computational preparation presented themselves as suggestions: selecting, splitting and assembling sound files with a specific focus on certain criteria.

WAV files having undergone grid transfer fragmentation:

Accepted WAV files both in (size and duration) diagram: (fig11 - step3) or a combination of WAV files in a cluster/s diagram (fig.9 step4 and 5), specification requirements of each WAV file accepted are considered and allowed access but not the total (size and duration) of the combination is considered only each of the fragmentation making up the WAV file. If one fragmentation (size and duration) is rejected, the presence of the cluster would cause the whole cluster to be rejected.

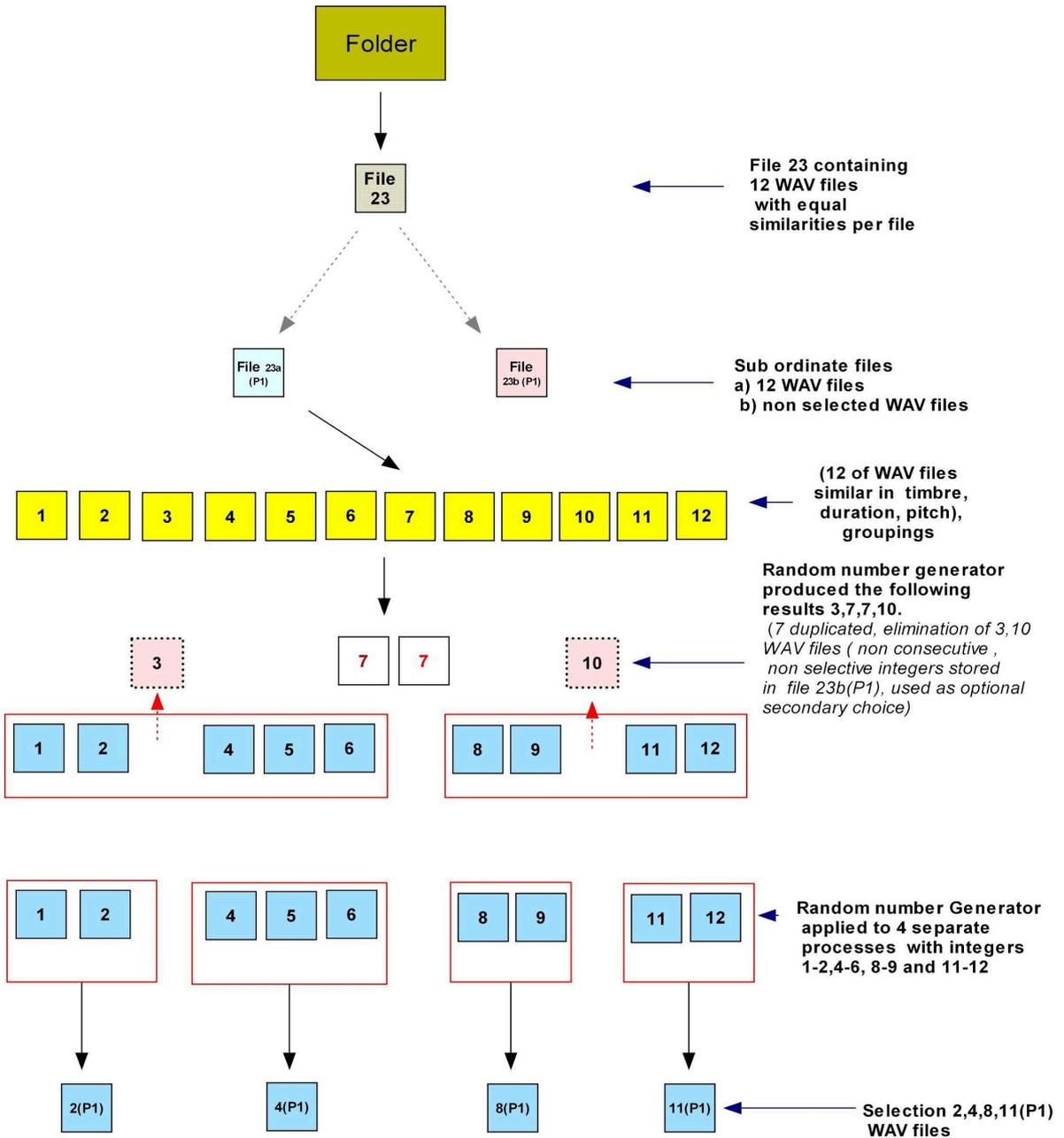


Fig 10: Random number generator selecting 2, 4, 8, 11 WAV fragments from consecutive chain of integers

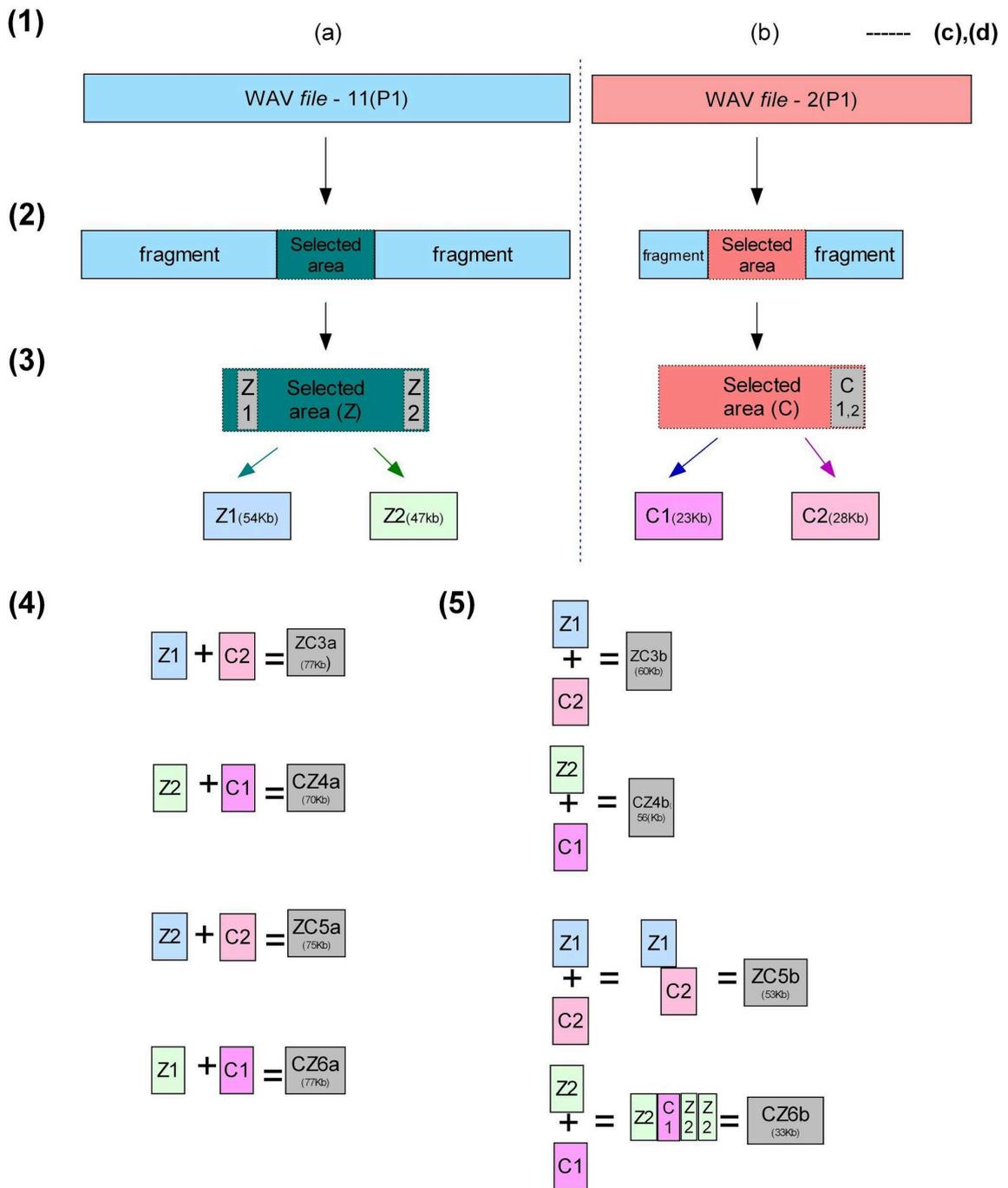
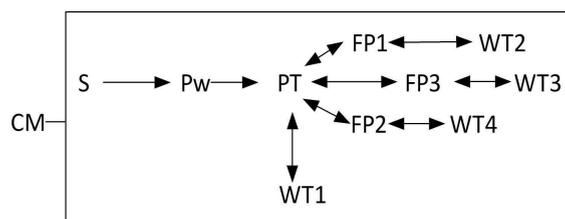


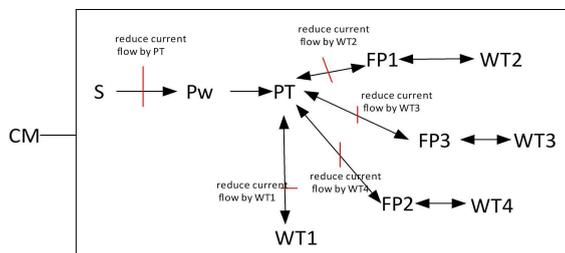
Fig 11: Demonstrating selection, editing (fragmentation) and fusion (coalescence , clusters) of sound segments 11 and 2

An electrical process regulated by feedback inhibition

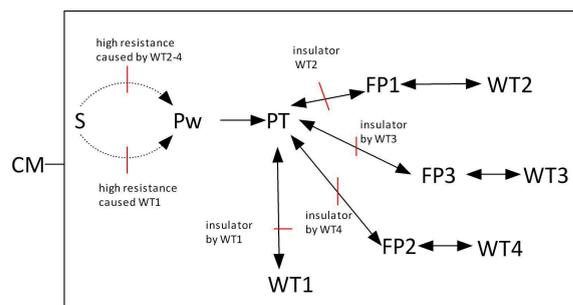
CM = cellular mobility, S = selectivity, Pw = processed WAV, PT = Port transfer, WT1= WAV files direct for port transfer not requiring fragmentation, FP1, FP2 , FP3 = Fragmentation procedures 1-3, T2, T3, T4 = WAV files from FP1-3 ready for port transfer. Take note of the steps that have bi-directional paths.



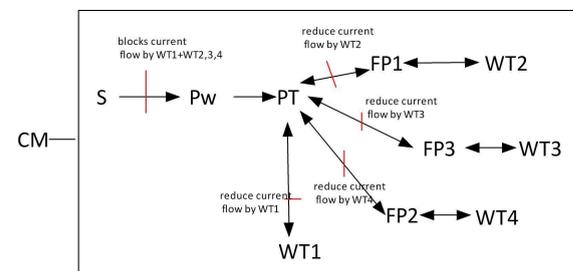
A high number of fragments WT1-4 are produced that would reduce current flow between steps (Pw – PT) the high number of WT1 would prevent the synthesis of WT2-4 if there were a deficiency number of WT2-4, the regulatory scheme is not optimal.



Sequential feedback control – current flow can be stopped or altered by a negative feedback systems, the feedback signal opposes the input signal, reducing gain and potentially limiting current flow – WT2 reduce current flow between step PT-FP1, WT3 reduce current flow between step PT-FP3, WT4 reduce current flow between step PT-FP4, WT1 reduce current flow between step PT-FP1 and PT reduce current flow between step S-PW .



Resistance multiplicity – presence of a high number of fragments in WT2-4 and WT1 causes a high resistance that blocks current flow in step (S-Pw). WT2 high resistance build up between step PT-FP1, WT3 insulator between step PT-FP3, WT4 insulator between step PT-FP4, WT1 insulator between step PT-FP1.



Concerted feedback control – a resistor limits the flow of current, creating resistance in the circuit.

Cumulative feedback control – The first common step (S-Pw) is partially inhibited by each of the final products. Each final product acts independently of the others.

WT1 decreases the rate of (S-Pw) from 100 to 60 sec<sup>-1</sup> , WT2 decreases the rate 100 to 30 sec<sup>-1</sup>, WT3 decreases the rate 100 to 25 decreases the rate 100 to 30 sec<sup>-1</sup> , WT4 decreases the rate 100 to 10 sec<sup>-1</sup>. Then the rate of S-Pw step in the presence of high levels of fragments of WT1-4 would be (0.6 x 0.3 x 0.25 x 0.1 x 100 sec<sup>-1</sup> ) = 0.45 sec<sup>-1</sup>. The inhibitory processes help to manage the volume of fragments displaced per unit time by regulating the amount of current flowing through the system and reducing depolarization of cells.

Cellular rules and colour functionality

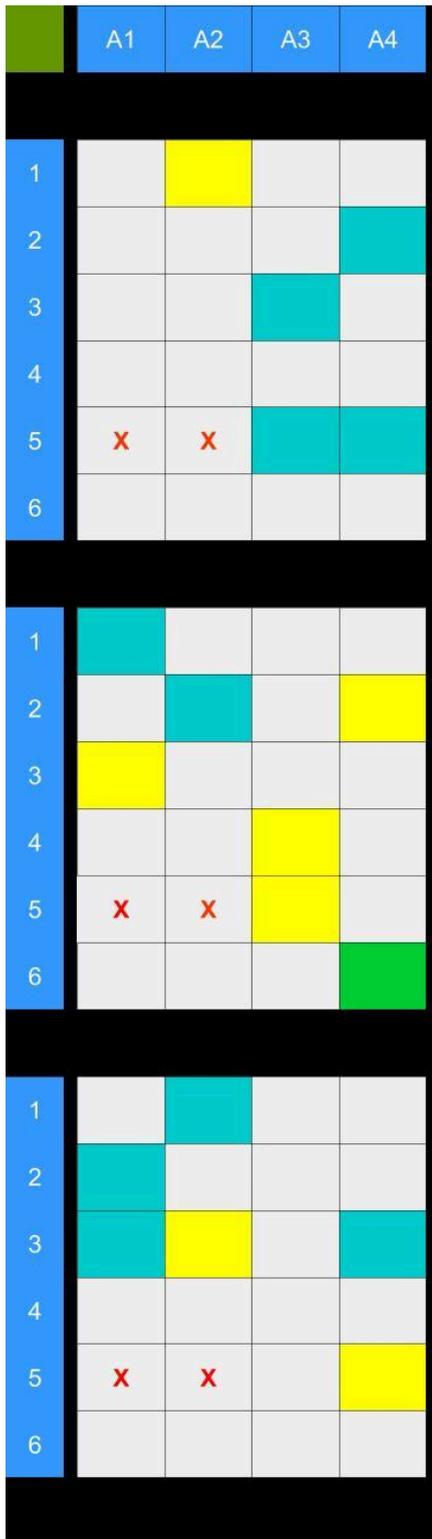


Fig 12: Ports 1-3

- Rule 1a** – Yellow cells act as active neighbours (open cells), allowing movement of blue cells into their area.
- Rule 1b** – Yellow cells with no neighbouring blue active cells remain inactive unless a blue cell occupies a neighbouring position, allowing neighbour activity, e.g. cell 2/A4, cell remains inactive, 4/A3 layer 2 with a possibility of changing its status, cell 5/A4 layer 3 remains inactive.
- L1**
  - Rule 1c** – Yellow cells introduced into the cell in random order, some could be referred to as active neighbours, others not; this depends on their positioning in the presence of blue cells.
  - Rule 1d** – In a transfer amongst layers, when a yellow cell gets superimposed on a yellow colour, then the cell will change to X white (to be discussed further in Rule 6).
  - Rule 2a** – White cells allow fragmentation to take place and remain temporarily inactive with the donor cell until the process is completed.
  - Rule 2b** – White cells marked with an X remain inactive without the possibility of changing, prohibiting colour change and movement of other cells within their space.
  - L2**
    - Rule 3a** – Blue cells are active cells with the ability to change the activity of yellow cells.
    - Rule 3b** – Transferring amongst ports: a blue cell is superimposed on another blue cell, then the transferred cell moves to a neighbouring position (competitive repositioning to be discussed further under Rule 8).
    - Rule 4a** – Green coloured cells are active with additional calculated abilities.
    - Rule 4b** – A green cell is transferred amongst ports and gets superimposed on a yellow cell it will be placed in the nearest white cell available in (East/West position), however if there are no white cells available the green cell returns to layer where it was transferred from attempts to be retransferred to another port, if the same problem persists the green cell changes its new placement to a white with X making the cell inactive.
    - L3**
      - Rule 4c** – A green cell is transferred amongst ports and is superimposed on a blue cell. It will be placed in the nearest white cell available (North/South position). If no white cells are available, it will seek placement in a clockwise rotation to the nearest white cell available. If no placements are available after having completed the rotation cycle, the green cell with its calculated abilities can shift the blue block to make placement space. (to be discussed further in Rule 7b and 9).
      - Rule 4d** – A green cell only when it superimposes a yellow and blue cell, follows procedures in (4b,4c).

**Rule 5 -**

Cells in Vertical and Horizontal positions

One or more (blue) active cells found in *series* in either vertical or horizontal position (active original layer), information will not be passed on to the other layers. Cells in *parallel* or *other positions*, information can be passed on to other layers (to be discussed further in Rule 7b).

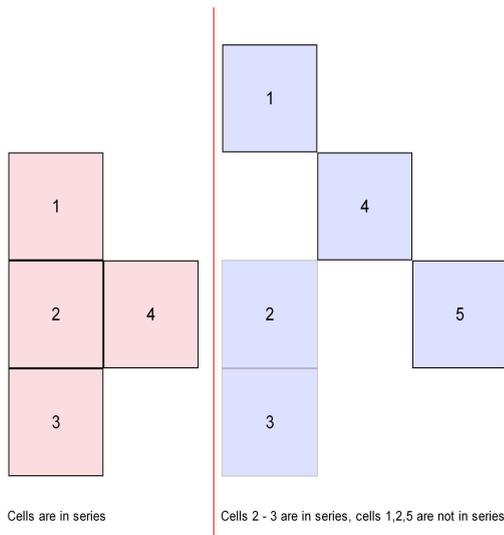


Fig 13: Active and Inactive Cells

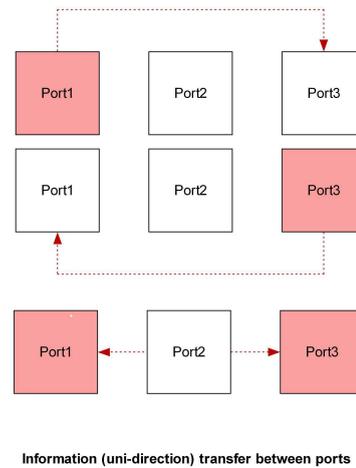


Fig 14

**Rule 6 -**

Port transfer locations

- Port 1 (donor) - transfer to port 3 (receiver).
- Port 3 (donor) - transfer to port 1 (receiver).
- Port 2 (donor) - transfer to ports 1 and 3 (receivers).

The colour of the cells changes in port transfer

- a] The port releasing the processed Sn, name, Pn of the WAV file is highlighted in green .
- b] Once the processed WAV file has reached its destination in the illuminating partition of the cube it attaches to the cell irrespective of its colour but it will not attach to a permanently inactive cell X.

c] A blue cell (active) cell transfers to an exact localized position in the destined cell of that port which is also of the colour blue then the cell in the transferred port will change to green (additional calculated abilities) and the transfer will be accepted.

d] All other coloured cells in port transfer (blue, white, yellow), (see cell status in Rule:1-4, and Rules:5-9) will occur but transfer will not be

accepted; the cell remains dormant until the cellular colour changes to green.

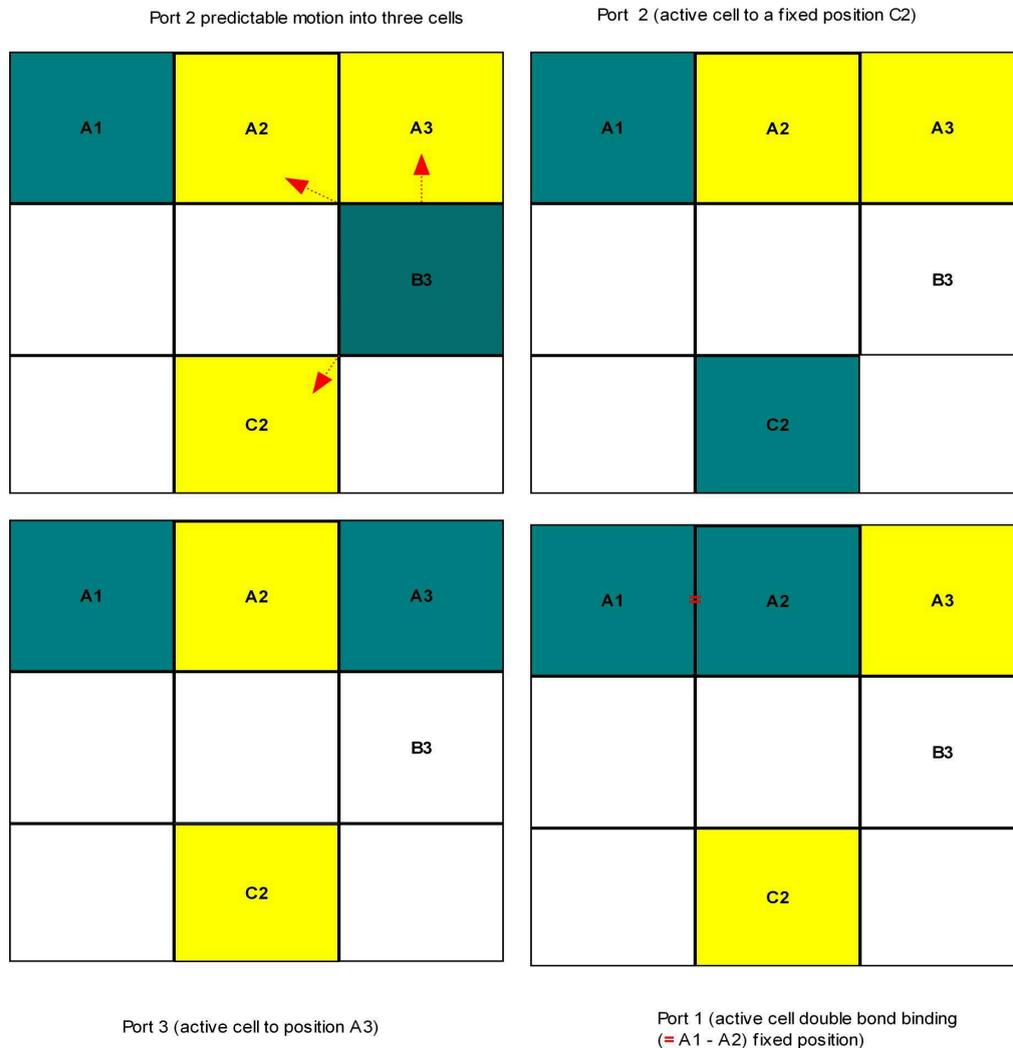
e] The cell in port 2 selected to transfer a WAV file/s is allowed access to specific positions in ports 1 and 3; all other cells receive T (a temporary inactive status) as the transfer is in progress.

f] Once the transfer has been accepted the WAV file gets stored in the destined port and appears in the top left hand corner of the screen the name only in red lettering appears.

g] The delay time for the transfer procedure taking place offers the performer time to further process sound in the circuits before selecting the WAV file returned to the destined port.

**Rule 7a –**

Splitting and binding within the cell



Splitting- binding motion of ports 3, 2,1

Fig 15: Active cell B3 can move into 3 active neighbourhood cells A2, A3, C2 (fixed position C2, active position A3, or binding position A2)

**Cells transferring information**

The double bond between A1 and A2 (fixed position) will allow transfer at once in Fig:15. A two-cell destination position is chosen in other ports, single bonded or other cells chosen to move both positions between ports 1 and 3 are available simultaneously, the process is nullified. Ports of destination chosen should be for both to move e.g. from port 2 to 1 or from port 2 to 3.

**Rule 7b -**

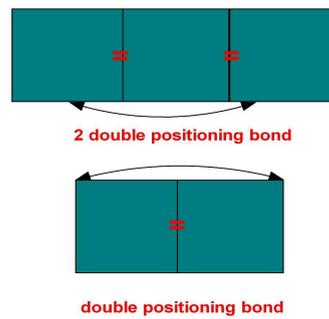
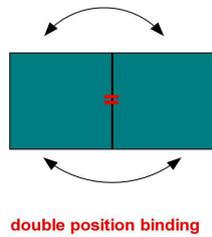
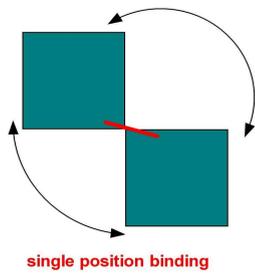


Fig 16

Fig 17

Two active cells bind in an angular position, which would allow for single-position binding because of two single positions involved in attachment, the cell detaches and repositions itself. Two active cells bind with each other to form a single or multiple double positions. This is due to the four positions of two cells involved in attachment. Detachment is prohibited.

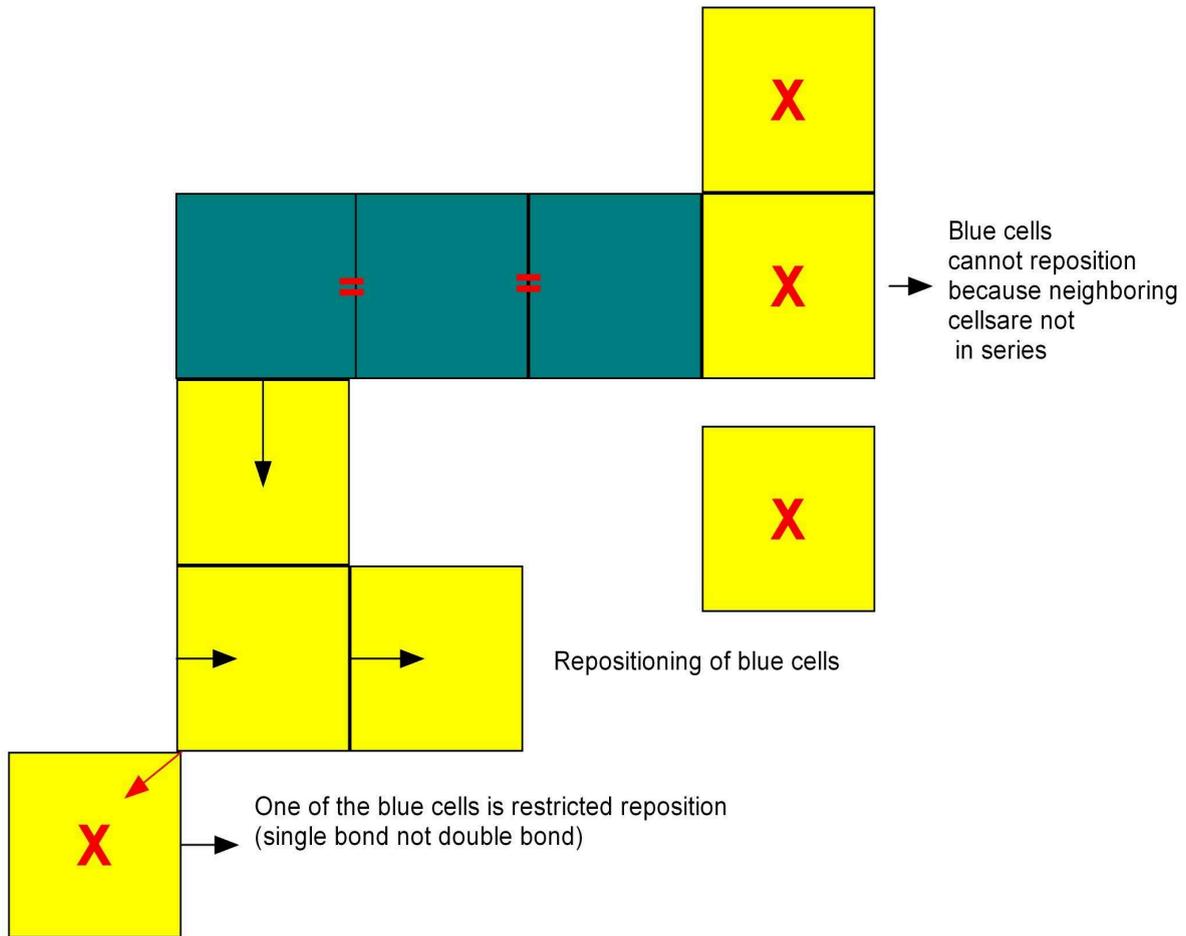
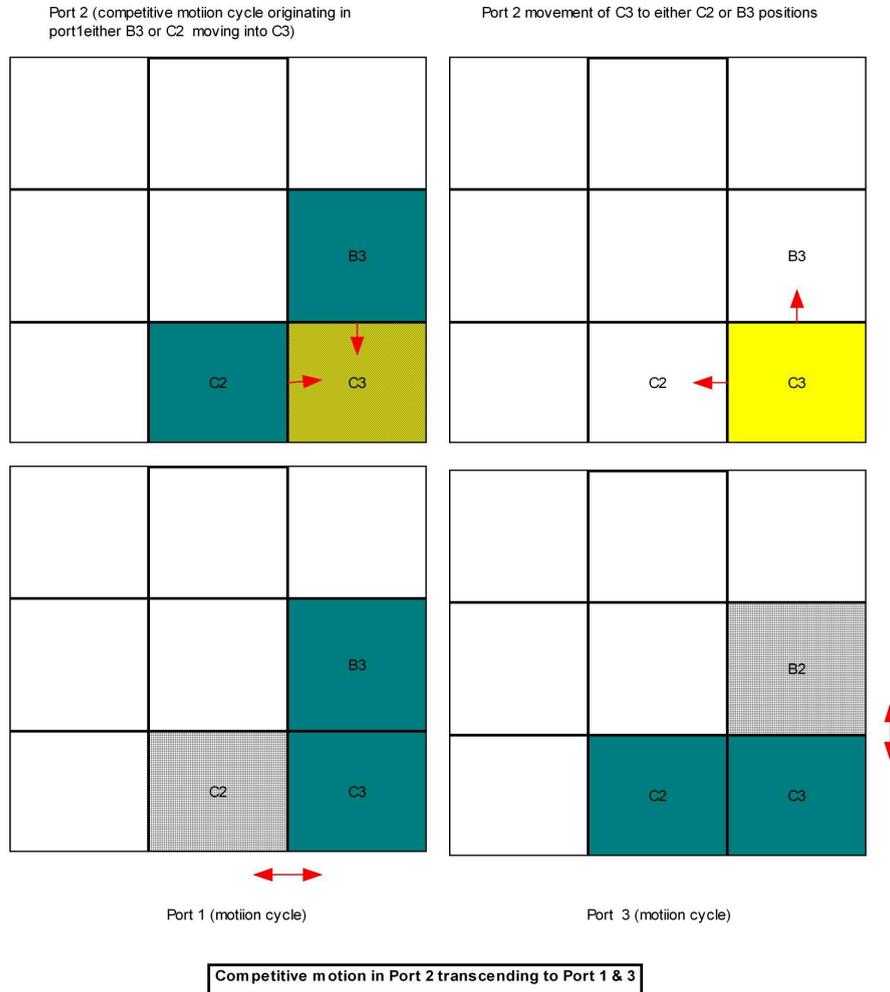


Fig 18: Three cells double position binding, to detach and re-position them, three yellow neighbour cells in series are needed (without affecting the original bonds), if neighbours are not present, then re-positioning will be blocked.

**Rule 8 -**

**Competitive repositioning**



**Fig 19:** Cells B3 and C2 in Cell 2 are involved in competitive repositioning because of equal competitiveness; C2 will occupy position C3, and B3 will occupy position C3. These positions will be reflected in Cells 1 and 3. Cell 2 will show activity indicated in the diagram above.

**Rule 9 -**

The green active blocks and additional benefits

a] Two blue active cells connected to the green cell with single or double positioning bond connections change the colour of the green cell to yellow.

b] Two blue active cells connected to the green cell with two double positioning bond connections change the colour of the green cell to X inactive.

c] Two blue active cells connected to the green cell with two single positioning bond connections change the colour of the green cell to active blue.

d] Two blue active cells superimposed on each other turn green

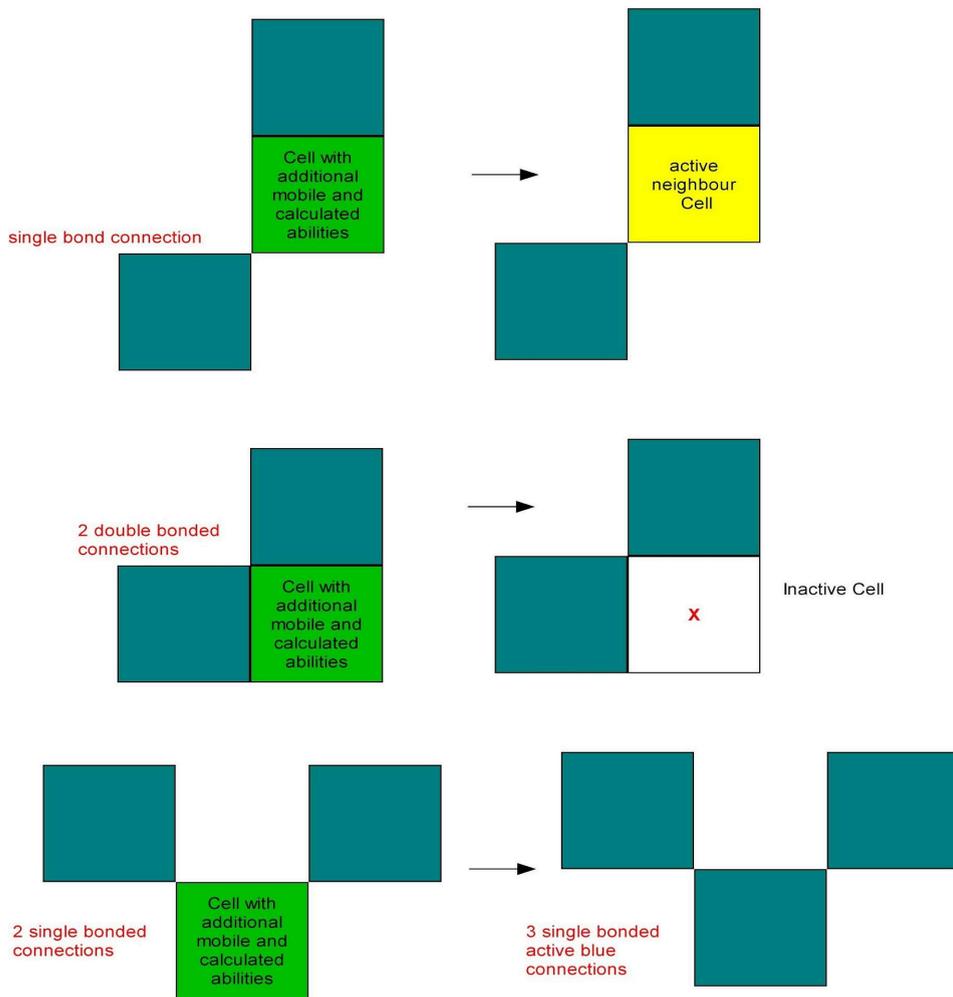


Fig 20

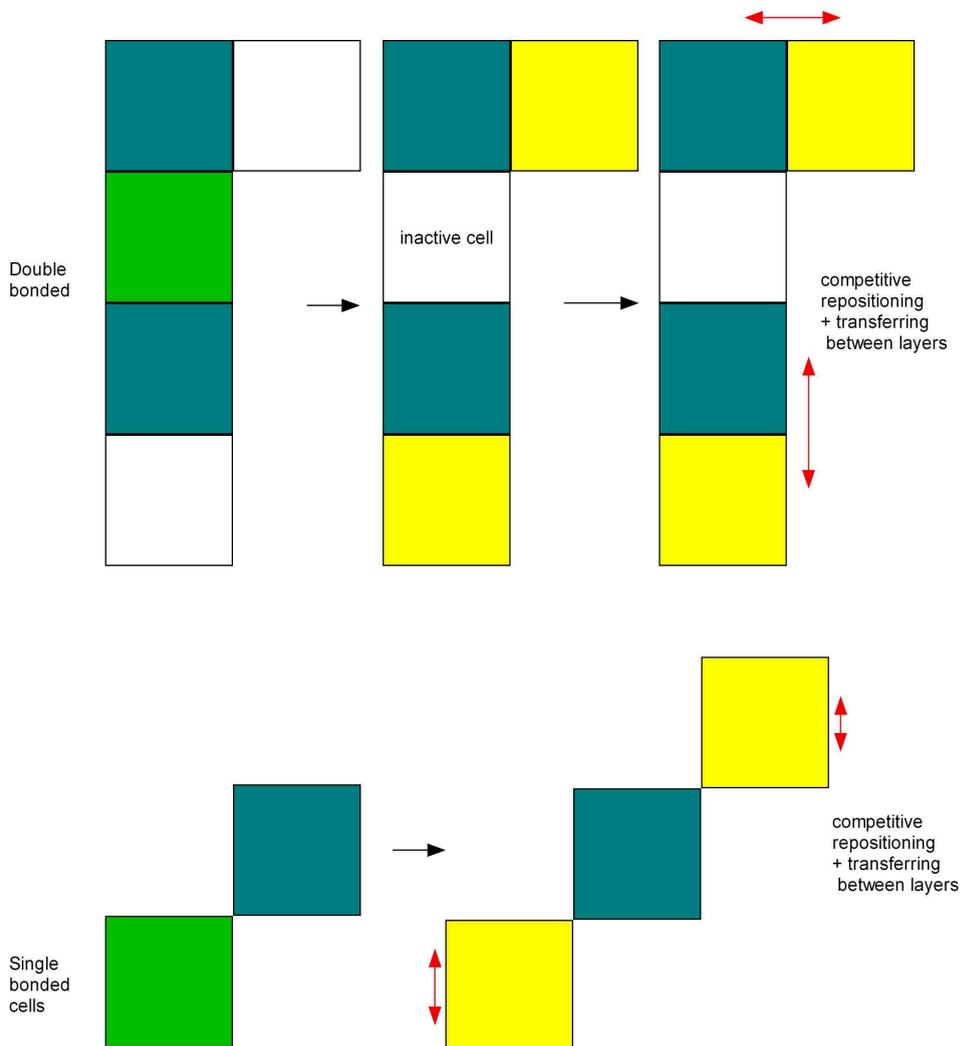


Fig 21

a) Two blue active cells connected to a green cell, with (two double bonds) change the colour of the green cell to X inactive white. Together with two yellow active neighbour cells, result in competitive repositioning and transfer between layers.

b) A blue active cell connected to a green cell with a single position bond changes the colour of the green cell to yellow with an additional single position bond to the yellow neighbour cell, resulting in competitive repositioning and transfer between ports.

Other compositions using the cellular rotating cube technology are found in the  $\Sigma$  series.

## II. CONCLUSION

Inspecting principles of three biosynthetic pathways, processing the breakdown of a WAV file, cross-cell communication and feedback inhibition, are selectively incorporated to control the functionality of modular circuitry centred around information exchange from a rotating cellular cube, where further processing occurs, changing the current state of WAV file size through fragmentation and reposition files within ports. The integrated network has rules and commands to follow, allowing processes to take place. The artificial environment in  $\Sigma(35-59)$  evolves within spatially heterogeneous spaces, associating with natural systems that

perform in a fragile, irregular manner. These activities are controlled by random forces; whose primary aim is not to try and mimic natural environments but to observe the micro-artificial systems within.

15. Biochemistry, 3rd Edn. Prentice Hall, Upper Saddle River, NJ 07458, pp 131-230
16. Kirchhoff 's Laws Physics Lab IX pp 1-9. <https://physics.mercer.edu/labs/manuals/manualEMLab/Kirchhoff.pdf>

### III. REFERENCES

1. ISO/TS 12913-2:2018; Soundscape—Part 2: Data Collection and Reporting Requirements. International Organization for Standardization: Geneva, Switzerland, 2018 ISO/TS 12913-2:2018
2. Fersht A (2000) Structure and mechanism in protein science: guide to enzyme catalysis and protein folding. 3rd revised edn. WH Freeman & Co Ltd. ISBN10: 0716732688, ISBN-13: 978-0716732686
3. Osgood, C.E.; Suci, G.J.; Tannenbaum, P.H. The Measurement of Meaning; University of Illinois Press: Champaign, IL, USA, 1957; pp. 550–551
4. Axelsson, Ö.; Nilsson, M.E.; Berglund, B. A principal components model of soundscape perception. *J. Acoust. Soc. Am.* 2010, 122, 2836–2846. DOI 10.1121/1.3493436
5. Andringa, T.; Lanser, J. How Pleasant Sounds Promote and Annoying Sounds Impede Health: A Cognitive Approach. *Int. J. Environ. Res. Public Health* 2013, 10, 1439–1461 ISSN 1660-4601
6. Hertz, J., Krogh, A., and Palmer, R. G., 'The Hopfield model' 11-35, 'Formal Statistical Mechanics of Neural Models' 251-265, Introduction to the theory of neural computation 1991 . ISBN 13: 978-0-201-51560-2
7. Berg JM, Stryer L, Tymoczko JL, Gatto GJ (2015) Biochemistry, 8th edn. WH Freeman, New York. ISBN-10: 1319153933, ISBN-13: 978-1319153939
8. Perception of soundscapes: An interdisciplinary approach. *Appl. Acoustics* 2013, 74, 224–231 ISBN/ISSN 0003-682X
9. Dewdney, A. K., "A cellular universe of debris, droplets, defects and demons", Scientific American, August 1989.
10. Russell, Bertrand. 1900 . A Critical Exposition of the Philosophy of Leibniz, with an Appendix of Leading Passages. Cambridge,[Eng.] The University Press. <http://archive.org/details/cu31924052172271>
11. <<http://archive.org/details/cu31924052172271>>
12. Beznea, L, M Deaconu & O Lupascu (2015). 'Branching processes for the fragmentation equation.' *Stochastic Processes and their Applications*, 125:1861–1885.

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# 新高考文学类文本阅读理解试题研究——以2020-2024全国卷为例

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## ABSTRACT

在2020年新高考模式的实施以来,文学类文本试题考察分值上升、材料的选用和题目的设置有一定的变化,对学生阅读素养的要求不断提高;使学生存在着“读不懂、答不准”的困惑与烦恼,一定程度上导致学生在文学类文本阅读试题上得分不高等问题。本课题研究采用数据统计法和文献统计法着眼于上述问题,从试题分析数据发现试题当中的重难点变化趋势,以此提出相应2025试题预测、高分应对策略为提高文学类文本试题得分提供参考。

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## 1. 引言

经过学科调整之后高考语文试题仍然是高中生学习的重点,起到检测培养学生语文素养的作用。新高考以来,文学类文本试题在其中的分值占比有所提高,在文学类文本材料阅读以及题目的考察上都有不同程度的变化,例如在题目考察方面分析能力的考察比例有较大提升,并且新高考文学类文本阅读试题也越发成熟,根据数据统计发现考察方向更为明确,例如在传统文化革命文化的材料选择上,所以必须对此类题型引起高度的重视,一方面要把握高考试题的材料选择方向、出题方式和考点频次;取得高分也要注意文学类文本阅读分析理解鉴赏的能

力培养。基于这一点,处在新高考之中的学生也不免有出现一定的学习问题,例如使学生无论是对选文的理解上还是对题目的理解上存在着“读不懂、答不准”的困惑与烦恼,一定程度上导致学生在文学类文本阅读试题上得分不高等问题,这也进一步展示处于这种情况下的学生和教师都需要采取专门的必要的应对措施。笔者根据近五年新高考语文试卷的文学类文本阅读试题开展研究,对2020-2024年的高考语文全国卷采用图表的形式进行深入分析,了解这五年新课标卷中文学类文本试题,对这些试题进行区分并明确考点发现改革后试题在分析能力、理解能力、鉴赏评价能力、探究能力四个方面相较以往都有不同程度的变化,以此确定考察当中的重点,以图表增强文章数据的可观性,并选择经典例题解答分析对高分

标准开展探究;在一定程度上借鉴前人经验,探讨其中难点的应对方法,并提出相应的高分标准,接下来从不同角度结合高考评价体系和新高考课程标准在材料选文和考点上总结一定规律并展开高分标准研究,对未来的考察提供一定的预测支持。最后通过以上研究并结合《高考评价体系》和《普通高中语文课程标准(2020年版)》,从教师角度提出要从“四层”出发的策略并采用访谈的方式加以实证、从学生角度提出在认知发展理论上相应的高分策略,并且根据以上研究对比四川卷展示两者不同,并且根据一定的数据展示其可行性。最后希望该研究对语文教师在文学类文本阅读方面的教学和学生的学习有帮助。

## II. 文献综述

在高考改革的背景下,文学类文本阅读试题的考察方向与侧重都存在巨大的变化,但是文学类文本阅读一直是高考试卷中极其重要的一部分,这一部分大的得分高低影响很大。处在高考改革中的文学类文本阅读试题考察存在着选文、题型、考点的变化,这些变化很大程度上影响着学生在文学类文本阅读试题的得分高低。但是经过五年的新高考,这些变化也可以经过一定的统计数据进行分析其中的规律所在以此来应对。在这种背景下存在着不同的研究态势,如下:

以语文核心素养为根基专门研究小说高分应对策略,例如:陈鲁峰的《语文学科核心素养视域下小说文本阅读命题新格局及应对策略——以2019年高考语文全国卷文学类文本阅读为例》“2019年以来的选文体现了高考学科核心素养的重要地位”[1]该研究是针对2019年的全国卷,研究的新高考数据较少,不能体现全面体现新高考的趋势。

以命题为研究主方向的:欧阳荐枫的在《2020年高考文学类文本阅读命题趋向及应对策略》中提到“2020年高考文学类文本阅读命题呈现——关键能力的培养为体现的趋势”[2]该研究主要是从高考的核心功能以此推出语文教学实践的重要性以此来提出以基础教育为主的策略,但该研究的考察标准比较单一,说服力不足。

从中不难发现缺乏对近几年的新高考文学类文本阅读试题的整体性的研究归纳,给与处在和马上就面临高考改革的学生帮助的应对策略,因为有相当的学生对与新高考文学类文本阅读试题变化之后存在着读不懂、答不准的问题,而现在也没有一个系统性的有较多新高考试题研究作为支撑的应对策略大的提出,存在着对新高考文学类文本阅读考察的认识还较为模糊,例如新高考中的文学类文本阅读试题考察能力变化程度也有待研究。本篇研究希望提高文献法以及数据统计法,能够较为全面的,给与教师学生在应对新高考文学类文本阅读试题时有帮助。

## III. 核心概念界定

### 1. 新高考

新高考自2020年起在部分省份启动试点,近年来随着新高考改革的逐步推进,最后一批省份完成改革方案落地,新高考将在2025年全国范围内实现全面覆盖。新高考取消了文理分科,实行3+1+2模式,在以往的基础上改变了教材、考点、题型等方面的内容。

### 2. 文学类文本试题

本文的文学类文本试题是指在新高考试卷中以小说或散文为考察选材的6、7、8、9这四道题。

## IV. 高考文学类文本阅读试题分析

文学类阅读本来就是高考语文现代文阅读部分的必考题型,但是在经理改革以后也出现了许多变化,例如由原本的3个问题变为了4个问题,在原来的基础上增加了一个客观选择题。构成该部分试题十分重视考查现代文阅读理解能力,并且现如今文学类文本阅读的分值也有所提高,更提高了其在现代文阅读的三大板块中的地位,并且学生在这方面存在读不懂材料的问题,故它是现代文阅读部分取得高分和语文综合成绩取得突破的关键所在。以下是经过调研统计近五年的新高考全国卷文学类文本阅读试题,将试题按年份、卷别、题目、作者、题型、分值、体裁来进行整理绘制的表格如表1。

表1: 2020-2024年文学类阅读试题

年份	卷别	题目	作者	题型	分值	体裁
2020年	I 卷	《建水记》（之四）	于坚	2选择+2简答	18 (3+3+4+6)	散文
	II 卷	《大师》	双雪涛	2选择+2简答	16 (3+3+6+6)	小说
2021年	I 卷	文本一《放猖》 文本二《莫须有先生 教国语》	废名	2选择+2简答	18 (3+3+6+6)	散文
	II 卷	《石门阵》	卞之琳	2选择+2简答	16 (3+3+4+6)	小说
2022年	I 卷	《江上》	冯至	2选择+2简答	18 (3+3+6+6)	小说
	II 卷	《到橘子林去》	李广田	2选择+2简答	16 (3+3+4+6)	散文
2023年	I 卷	《给儿子》	陈村	2选择+2简答	16 (3+3+4+6)	小说
	II 卷	《社戏》（节选）	沈从文	2选择+2简答	16 (3+3+4+6)	小说
2024年	I 卷	《放牛记》	徐则臣	2选择+2简答	16 (3+3+4+6)	散文
	II 卷	《千里江山图》（节 选）	孙甘露	2选择+2简答	16 (3+3+4+6)	小说

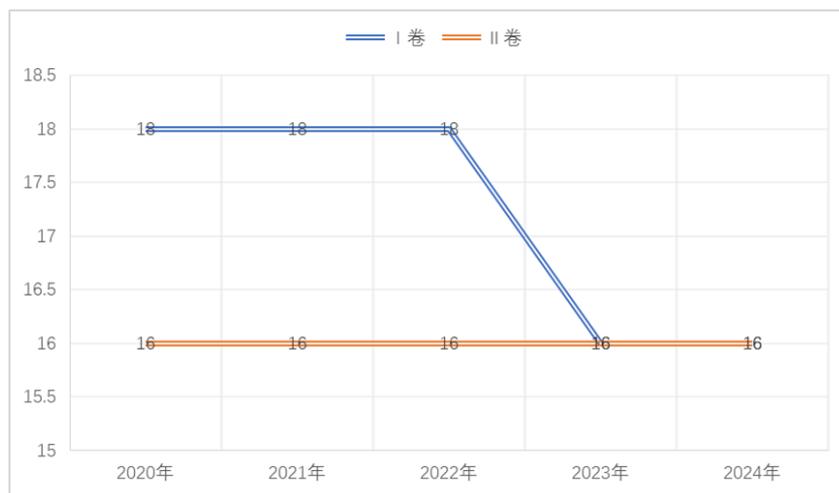


图1: 新高考 I 卷 II 卷分值变化

### 1. 高考文学类阅读试题题型分析

通过表1和图1发现,从2020~2024年均采用的是新课标I卷和II卷和的形式,试题题型近四年新高考语文试题一直沿用“客观选择题+主观论述题”的模式,其中客观选择题为2道,所占分值为6分,主观论述题有两道,以简答的形式呈现,所占分值在“6+6”分或者“4+6”分,呈现一个循环使用的模式。从分值变化上也可以看出,客观选择题增加了1道,主观论述题分数变化不大,但是仍然是考察侧重,并且考察内容设问形式也越来越多元化,这要求广大师生群体必须提高现代文的阅读的能力,在客观选择题上也要增加一定的投入。

### 2. 高考文学类阅读试题选文分析

借助表格进行对比剖析,能让我们较为精准地掌握这一板块试题的选材规律。先从体裁视角来看,上文10篇选文仅涉及小说和散文这两种体裁。其中,小说占了6篇,散文为4篇。数据清晰表明,近五年新高考文学类阅读在体裁考查上小说和散文都不可轻视。但是有在一定程度上体现多元化,究其原因,一是这两类体裁在内容层次上更为多元丰富,二是它们能结合社会生活进行考查评价充分彰显人文关怀。

再从作者维度分析,这10篇选文的作者各不相同,其中部分作者广为人知,另一部分则相对陌生。不过深入探究就会发现,这些作者要么是现当代文坛中声名显赫的大家,要么是崭露头角的后起之秀。比如沈从文、卞之琳等文学大家,学生们大多耳熟能详;而像冯志、于坚、双雪涛等人,他们在当代社会的文学领域十分活跃。这意味着文学类文本阅读的考试内容并未脱离我们的学习范围,考生只需持续阅读、积极积累,不断拓展知识面,就能更得心应手地把握和鉴赏文本。

### 3. 高考文学类阅读试题考点分析

根据《中国高考评价体系》以及最新考试大纲对语文学科高考考核的目标与要求,文学类文本阅读的考核内容主要是阅读和鉴赏国内经典文学作品。

“从语文核心素养上讲,文学类阅读考点注重从理解、分析综合、鉴赏评价、探究四个层级来考查学生掌握知识的能力”[3],这四种能力落实到具体的题目中,又可以在不同的文本中发现共同的特质,“均要求能够透过现象看本质,发现隐含的规律或原理,能够对学科基本知识进行结构化理解”[4],以下便是对相关考查内容做的具体地调查统计,如表2:

表2: 2020-2024年文学类阅读试题考点

考查能力	考点	年份	卷别	题型	数量	比例	
理解能力	理解概念含义	2020年	II卷	简答题3	3	27.5%	
		2021年	II卷	简答题3			
		2021年	I卷	简答题4			
	理解句子含义	2020年	II卷	选择题1	8		
		2020年	II卷	选择题1			
		2021年	II卷	选择题2			
		2021年	I卷	选择题1			
		2022年	II卷	选择题1			
		2023年	I卷	选择题1			
		2023年	II卷	选择题1			
2024年	II卷	选择题1					
分析能力	分析作品结构	2020年	I卷	简答题4	5	35%	
		2022年	II卷	选择题2			
		2021年	I卷	选择题2			
		2024年	II卷	简答题4			
	概括作品主题	2020年	II卷	简答题4	4		
		2022年	I卷	选择题2			
		2022年	II卷	简答题3			
		2024年	I卷	简答题1			
	分析题材特征和表现手法	分析题材特征和表现手法	2020年	I卷	简答题3		6
			2021年	I卷	简答题1		
2023年			II卷	简答题1			
2022年			II卷	简答题4			
2024年			I卷	选择题2			
2024年			II卷	选择题2			
鉴赏评价能力	评价类	2020年	I卷	选择题2	4	25%	
		2021年	II卷	选择题1			
		2023年	I卷	选择题2			
		2023年	II卷	选择题2			
	人物形象魅力及分析	2020年	II卷	选择题2	6		
		2022年	I卷	简答题1			
		2022年	I卷	选择题1			
		2023年	I卷	简答题3			
探究能力	创作背景和意图	2024年	I卷	选择题1	2	12.5%	
		2024年	II卷	简答题3			
		2021年	II卷	简答题4			
		2023年	II卷	简答题4			

民族心理和人文精神	2022年	I 卷	简答题4	2
	2024年	I 卷	简答题4	
个性阅读和创意阅读	2023年	I 卷	简答题4	1

根据表2所提供的信息可知,这40道试题,分析能力是考察重中之重,试题占比已经达到了35%,其次就是理解能力的考查占比达27.5%,然后就是鉴赏评价能力占比25%,最后才是探究能力占比12.5%。

结合以上图表与《中国高考评价体系》分析:高考评价体系将应考查的素质教育目标凝练为“核心价值、学科素养、关键能力、必备知识”的“四层”考查内容。在高考评价体系的四层中:核心价值层确立导向功能,通过价值落实立德树人根本任务;学科素养层助推能力转化,将价值引领转化为素养;关键能力帮助实际解决问题,形成包括信息处理、逻辑推理、批判创新等维度构成的能力;必备知识层是基础,涵盖学科基础概念、原理及方法论的知识。

结合以上图表分析可知高考试卷当中的这些问题情景是有依据的,表2中的这些能力处在关键能力体系当中,并且通过问题情境体现语文学科素养的能力表征与必备知识,通过二者相结合分析出语文学科素养,再从语文学科素养分析考察方向就可以看出其中所表现的核心价值,最后来达到立德树人的效果。

从关键能力来看:知识获取能力群强调的是“理解”,它表现为阅读与理解文本、获取提取信息、概括和描述、结构化理解;[4]实践操作能力群强调的是“学以致用”,它表现为理论联系实际、有逻辑的处理问题、准确语言表达;思维认知能力群强调的是“加工”,它表现为创造性看法、发散或逆向解决问题、发现新问题、验证新结论。从这里我们可知“考什么”问题。结合表2也可以印证高考试卷考察的这些能力正处于高考评价体系的“四层”关键能力的三大能力群当中。所以可以确定的是高考文学类文本阅读试题的考察内容是高考评价体系相匹配的,并且能力考察的重点处于“实践操作能力群”题型占比高达60%,并且在该能力群当中对于语文学科来说重点是“语言表达能力、分析解决能力”。

## V. 高考文学类阅读试题及考点分析整理结果

### 1. 试题选文更为多元,但具有稳定性

文学类文本在选材上呈现多元化策略。经典性与当代性并存:因为在选文上既有沈从文(《社戏》)、废名(《放猖》)等这样的现代文学经典,也有双雪涛(《大师》)、孙甘露(《千里江山图》)等当代作家作品,体现文学脉络的贯通性。这样去选取文章其实在一定程度上是为了不让学生套模板,只会用套路答题,这样做的目的也是为了考核学生是否能够真正的读懂文章,这就要求学生具备货真价实的能力。

文本组合创新:2021年 I 卷首次采用双文本对比阅读(《放猖》+《莫须有先生教国语》),强化对互文性解答题的考查。核心能力考查的深化:客观题侧重微观理解:选择题聚焦细节定位、修辞手法、情感态度等基础能力(如《建水记》中对古城意象的分析)。主观题强调宏观思辨:简答题要求主题提炼、结构分析、创作意图阐释(如《石门阵》中“叙事视角的作用”),凸显对批判性思维和文学审美素养的更高的要求。

### 2. 试题考点分布差距大,但重点突出

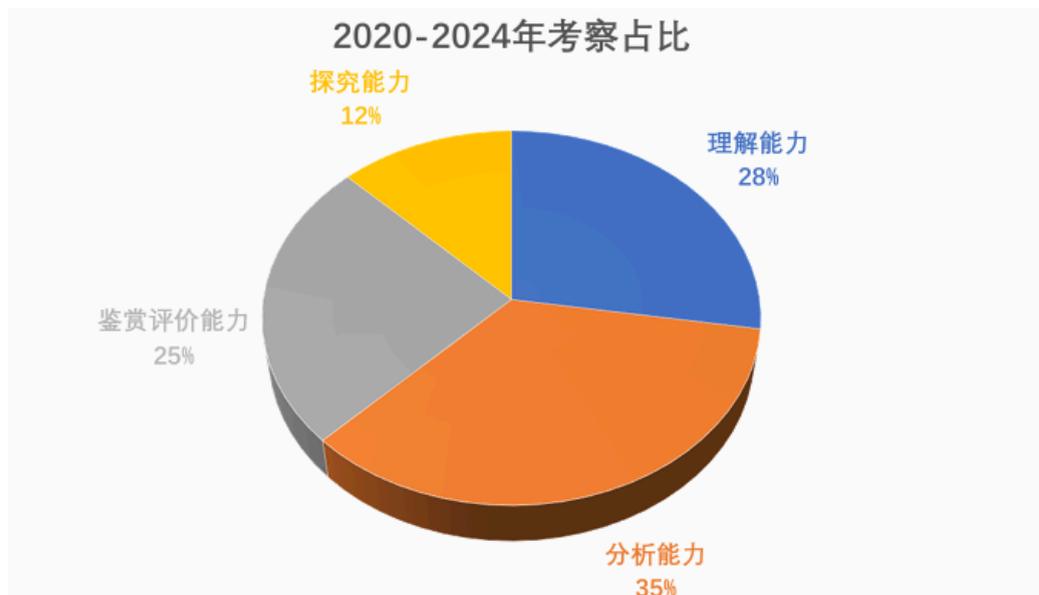


图2四大能力占比

通过图2统计可以发现,不同能力的考查权重差异显著。结合《中国高考评价体系》的要求,我认为分析能力最为关键,(占比35%)分析能力要求学生拆解文本逻辑、提炼核心信息、发现写作规律,是连接“读”与“答”的核心枢纽。通过前文的统计发现高频考点有:分析作品结构:如《石门阵》中“村民视角的叙事作用”;概括主题:如《到橘子林去》中对“时代与个人命运”的总结;分析表现手法,如《放猖》中“民俗描写对情感表达的推动”。不难发现文学类文本的命题意图在避免学生“凭感觉答题”,要求有逻辑的解决问题:如“结构分析”需结合段落关到主题表达再到作者意图。作为最高频的考察能力,学生在应对时也会存在读不懂,答不准的问题,可以通过画“思维导图”:阅读时快速标注段落功能,如“铺垫、转折、高潮”圈出重复意象,如“雨→象征压抑”,形成可视化分析框架。

其次是理解能力(占比27.5%)理解能力其实是回答每道题的基础,若读不懂关键词句,如双关语、隐喻,后续分析、鉴赏都会偏离方向。该能力的高频考点就包括:理解概念含义如《莫须有先生教国语》中“国语”的深层指代,理解句子含义如《千里江山图》中“画布上的裂痕,是他心里的裂痕”的象征意义。在客观选择题上常常有命题陷阱:选项常设置“偷换概念”如将“无奈”替换为“愤怒”或“断章取义”脱离上下文曲解句子。针对这种情况可以标出题干关键词;回原文锁定相关段落;结合前后句语境推断含义不能孤立理解。

再次是鉴赏评价能力(占比25%)这个能力的考查要求学生从“读懂”升级到“品评”,体现审美素养和批判性思维。中的高频考点就有:语言风格评价,如《建水记》的“诗化语言”如何增强感染力;人物形象分析,如《大

师》中“父亲沉默寡言”背后的时代创伤。在这个能力的考察中近年更强调“动态评价”,如“分析人物性格的变化”而非静态特点和“多维对比”,如同一意象在不同段落中的情感差异。

最后是探究能力(占比12.5%)该能力其实是在获得基础分的基础上拿到高分的关键。探究题看似开放,实则需基于文本的创造性解读,既要紧扣原文,又要有独到见解。中的高频考点就有创作意图探究如《社戏》节选“为何淡化战争描写”;人文精神挖掘如《放牛记》中“人与自然关系”的现代启示。总的来说还是要以语文素养的培养为核心,先练分析,再攻鉴赏:没有结构分析能力,鉴赏容易流于表面抒情;理解能力日常化:每天精读1篇散文或者小说,强制自己用“一句话概括主旨”;探究题大胆练:即使模考扣分,也要尝试提出个性化观点。

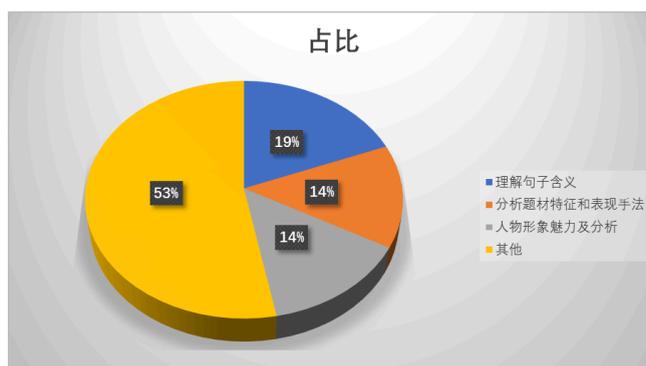


图3三大考点占比

根据图3统计以及重视文本深度剖析，“分析题材特征和表现手法”考点占比较高，说明高考注重考查学生对文学作品创作手法、题材特点的理解与分析能力，要求学生能深入剖析作品如何通过独特的题材和表现手法来传达内涵，体现了对文本深度解读的重视。

关注人物形象理解，“人物形象魅力及分析”考查数量多，表明文学类文本阅读重视学生对人物形象的把握。人物是文学作品的核心要素之一，能理解作品所反映的社会生活、作者的情感态度等，体现了对人物在文学作品中核心地位的关注。强调关键语句解读，“理解句子含义”考点受重视，说明高考注重考查学生对文本中关键语句的理解。文学作品中有些句子蕴含着丰富的情感、主旨或特殊的表达效果等，准确理解这些句子是读懂作品的关键，体现了对文本核心语句理解能力的要求。

总体而言，这三个考查数量最多的考点，共同指向学生对文学作品从内容到形式、从人物到语句的综合理解与分析能力，反映出高考文学类文本阅读对学生深度阅读和综合鉴赏能力的重视。

## VI. 2025新高考文学类语文试题预测

基于对近五年(2019-2024年)新高考文学类在题型、选文、考点等方面的分析，并结合相关学者和专家在此方面的研究，以及访谈多位一线教师的经验，对2025年高考文学类命题趋势进行预测，帮助学生备战高考，在文言文阅读中取得高分

选文类型	选文来源 革命文化	选文文体 小说	选文类别 现代文	
题型与分值	2道客观题（6分）+2主观题（6分表现手法分析题+6分内容评价题）			
考点	客观理解题考 点、过渡句意义 理解	分析客观题 文章主题及情 感分析	表现手法分析概括题、留 白的运用及好处	内容评价、评价形 象，作者创作

预测2025年高考文学类文本在题型和分值上不会有太大变化，可能在最后的主观问答题会适当调整分数，但大体不变。在选文方面可能会选择当代文本阅读，可能来自革命文化，建议先看与红色传承有关的，进行阅读训练。在考点分布上，客观理解题有一处可能会考查对特殊过渡句的理解，分析类客观题大概是2个有关文章作者表达情感选项加上2个文章主题表现的选项，建议学生平时在学习多锻炼这方面分析能力。表现手法分析题大多数考点来自教材讲解过的手法，还可能会考1个比较少见的手法，因此学生要回归教材，做好手法的积累与整理工作。最后一道主观内容评价题大概率会考评价有关形象，要求学生分析某一事件中的人物形象，考察学生归纳总结能力、逻辑思维能力以及批判性思维能力。

## VII. 新高考文学类阅读高分应对策略

通过以上对近五年真题的统计分析，我们可以得出更好地应对策略，以下就是从教师方面、学生方面和试题方面系统的对文学类阅读提出的高分应对策略。

### 1. 教师方面

立德为本，培育正确价值观

根据前文分析可知，在以“立德树人”为根本任务的新时期，注重价值观培育是语文学科完成育人任务的必要前提。2020-2024年的文学类文本阅读试题一方面精选阅读材料，以积极的价值观滋养学生灵魂；一方面创新设问，在无形之中促使学生自觉养成优良德行。再结合《高考评价体系》教师在教学中应当结合由必备知识、关键能力、学科素养、核心价值的逻辑结合实际课堂开展教学。例如“跑”字的好处，首先从必备知识来看，认识问题可知为考察动词使用的好处，这其中包含“跑”这个动词的基本概念等等；所以教师在文学类文本课文教学当中应当注意反复出现的词或者一连串的动词效果并讲解相关基本概念、基本原理、基本方法进而使学生具有高质量的分析认识问题，分析问题，解决问题的一定水平；分析可知这道题考察理解能力，这要求教师向学生传授透过现象看本质发现隐含的规律和原理的能力。这道题体现为学科素养当中的“学习掌握”当中的“理解掌握”指标，这还是要求教师让学生能够透过学习过的知识对新信息分析

评价。从核心价值来看《放猖》这篇文章属于道德品质和综合素养的品德修养指标，其内涵是有大爱大德大情怀，理性面对当代文化、社会、环境等，对传统文化有担当最终达到立德树人的效果。而现在的考察文本以传统文化、革命文化的理解传承为重点，并且其与文言文和古代诗歌相比，近现代文学作品语言通俗，内容生动，可以更好地调动学生的学习兴趣。因此，“挖掘文学类文本中的传统文化，也是理解和继承优秀传统文化的可行之路”[5]。

下面是关于对于高考评价体系运用方面的可行性对高中一线教师的访谈整理所得结果：

表3访谈结果

您了解高考评价体系当中的“四层”构架吗？您认为现在的高中教师对“四层”了解吗？	整理结果：在高考改革之后，高考评价体系起着非常重要的作用，对于高中语文一线教师来说了解高考评价体系非常有必要，因为高考评价体系对于教学具有重大意义。从四层而言部分教师已经深入实践，还有一部分教师处于探索当中。
您会结合高考评价体系开展教学吗？	整理结果：调研数据显示大约有60%的高中一线教师会根据高考评价体系调整教学策略及重点，更多的教师会在教学中强化思维训练
您认为运用高考评价体系的“四层”结构教学的教学结果如何？	整理结果：数据显示情景化教学可提升学生成绩约15%，课堂参与度提升30%；在运用之后学生更易在教学实践当中形成正确的价值观，并且更能展现学生知识点掌握情况以及帮助后续的学习
在文学类文本阅读教学中高考评价体系的运用可行性大吗？	整理结果：可行性较大。现如今文学类文本阅读更多的是体现家国情怀、文化传承的文本；更加注重学科素养的培养，例如文学类文本阅读强调思维与审美能力；并且现如今的高考命题更加倾向于情景化命题，更多的生活化命题推动教学从解题转向解决问题。
您认为高考评价体系对于文学类文本教学帮助的未来发展前景如何？	整理结果：未来高考命题会进一步强化情景设计，加深教学与现实的联系；未来教学会更多的利用多媒体工具这有助于深化学生对文学文本的理解以此又能帮助运用高考评价体系。

### 从对高中一线教师融合高考评价体系中的四层构架教学的访谈数据表3访谈

结果来看在文学类文本阅读教学中运用高考评价体系的构架在未来会起更大的作用，发展潜力大。

并且新时代统编版教材将中华优秀传统文化、革命文化、社会主义先进文化以及世界优秀文化融入实际教学，新时代有新要求：“课文是文化的载体，教师在教学中要注意引导学生从文化的角度去理解文学类文本的内涵”[6]。

#### 2. 学生方面

从最近发展区来看学生应该分阶段的设定目标，通过平时学习的分析方法，思维梳理，学会模仿和迁移。还要深入合作学习，培养自己的元认知能力。学生应当对自身学习能力、知识储备、水平有明确的认知，对语文学认识活动中的背景资料、学习任务的要求和目标的认知，借助支架形成自身的必备知识库以及各种解决问题情境的能力。“而这则需要以阅读和良好的学习方法为基础”[7]。

从认识诊断理论来看，在发挥其教学评价、试卷分析、学习障碍分析的功能之后，学生应当认识到自己的缺陷和不足，以此系统性的分析自己的知识点的掌握情况，在这其中学生应当更加注重主动思考从听讲者变成探索者，在面对文学类文本阅读试题时具有主动分析文本逻辑，提出个人讲解；“在试题分析当中基于难度、区分度等标准构建自身知识网络将零散知识点按逻辑关联结合，形成系统框架，这一过程当中学生可以使用思维导图和表格整理等等。”[8]

#### 3. 试题方面

##### 模拟练习，真题反思

2020年版《普通高中语文课程标准》也要求通过阅读与鉴赏、表达与交流、梳理与探究等语文实践，积累言语经验，把握语文运用的规律，学会语文运用方法，有效地提高语文能力，开展具有针对性的模拟练习，要从题目出发，进行一个深入思考，归纳不同题目的共同点和相似题目的不同点，根据自己的课后学习整理笔记，帮助自己回顾反思。而为数不多的高考真题，作为

语文选拔性测试的精华,更需要我们去反复练习,多次解构,“并对题目的考查内容和答案的模式框架仔细分辨,再将知识点分类细化,对考点的各种变化能够灵活的应对”[9]。

根据对新高考试卷的分析对尚未开始考察新高考试卷的四川卷进行分析,这对于四川高考生的学习也有很大的帮助,通过对比可以发现以下几点。

(1) 强理解能力。语言细节分析:“高频考查具体词句的深层含义(如动词效果、矛盾句解析),要求学生精准把握文本的微观语言现象”错误!未找到引用源。。如2021年I卷对动词好处的追问,2024年II卷对矛盾句的剖析,均需学生穿透文字表层,挖掘隐含逻辑。象征与隐喻解码:反复出现对物象多重意义的考查(如2020-2021年连续涉及物象用意),强调对文本象征体系的系统解读能力,需学生建立意象与主题的关联网。

(2) 发展思维认知能力。创作手法解构:高频出现改写效果、描写方式、等题(如2022年I卷、2023年II卷),引导学生逆向还原作者的创作策略,理解形式与内容的共生关系。文体意识强化:2022年四川卷文体艺术差异与新高考、散文鉴赏形成呼应,但新高考更强调在具体文本中动态把握文体特征,而非静态知识记忆。

新高考试卷对于语言建构和实际运用的能力考查更为全面,作为基础性的核心素养之一,学生的语言建构和运用是语文学科的基础,可以帮助学生了解基础性的语文知识。语言建构能力的提高需要大量的阅读才能实现,这对于当前高中语文学科的学习是非常重要的,利用阅读可以从文本信息中认识世界,并形成自身的思维体系,例如在阅读过程中,可以让学生通过自己所搜集到的文本信息进行加工整理,并能够运用语言文字将其表达出来。

总之,新高考在继承传统阅读能力考查的基础上,呈现出「微观解码精确化、文本关联网络化、思维过程可视化」的命题趋势。其核心指向语文核心素养的立体化测评——通过构建复杂的文本情境,考查学生在语言建构、审美鉴赏、文化传承等多维度的综合素养,最终实现从「答题技巧」到「学科本质能力」的考核转向。这对教学启示在于:需强化细读训练,培养跨文本思维,并注重将文学鉴赏转化为真实的语言实践能力。

#### 4. 稳定心态,合理应对

文学类阅读测试的难易程度会因文本选材差异而动态变化,这要求考生采取差异化的应对策略。面对基础性试题时,需保持高度专注与严谨态度,这类题目往往通过细致审题和规范作答即可实现高分突破;而遭遇高难度文本时,则要善于运用文本细读与逻辑推导能力,将复杂文本解构成可理解的语义单元。

在考试心理建设方面,可以从以下三点着手:其一,树立考试场景模拟意识,通过日常测验培养考场时间感知与应激反应能力;其二,采用正念呼吸法调控临场状态;其三,实施压力梯度释放策略,考后及时进行学习复

盘。这样既能展现精准的文本解析能力,又可保持稳定的心理势能,最终实现学术素养的全面呈现。

## VIII. 结语

综上所述,文学类文本阅读试题对于处在高考改革中的学生或者即将面对高考改革的学生都是一个重要的得分点,但是这其中又存在着一系列的问题,对学生和老师都提出了新的要求,要抓住新高考重点,基于2020-2024年全国卷文学类阅读试题以题目、作者、题型、分值等方面统计分析,在题型、选材、考点几个方面开展了研究以此来突出考察重难点,再于此基础上结合实际考察案例对考查内容进行归类和细化,然后结合该类题型阅卷的高分标准具体实例剖析,在教师角度结合《高考评价标准》提出应对策略并结合实际访谈内容整理结果展示其可行性、在学生角度从认知发展理论出发提出策略、在试题方面结合四川情况进行分析,针对这一部分给出可行性建议,基于数据对答题技巧进行总结,该研究希望对一线教师提供参考,帮助学生提高得分。

由于本文研究时间有限,论述内容与过程主要从考察重点出发,考察难点未详细研究有待进一步完善,后续需在实践中持续补充,使研究更加严谨、全面、准确、科学。

## IX. 参考文献

1. 陈鲁峰.语文学科核心素养视域下小说文本阅读命题新格局及应对策略——以2019年高考语文全国卷文学类文本阅读为例[J].语文教学通讯,2019,(28):68-71.
2. 欧阳荐枫.2020年高考文学类文本阅读命题趋向及应对策略[J].高中生,2020,(14):14-21.
3. 中华人民共和国教育部.普通高中语文课程标准(2020年版)[S].北京:人民教育出版社,2017:8.
4. 教育部考试中心.中国高考评价体系[S].北京:人民教育出版社,2019.
5. 郑爽.新高考文学类文本阅读试题分析及教学启示[D].华中师范大学,2024.
6. 魏倩倩.文化传承与理解视域下文学类文本的考查特点及备考建议——基于近年多省联考与高考文学类文本试题的分析[J].广西教育,2024,(08):39-42.
7. 冯军.文学研究的认知转向:从认知诗学到认知文学研究[J].外语研究,2022,(05):104-111.
8. Kohlberg, L. (1981). \*The philosophy of moral development: Moral stages and the idea of justice\*. Harper & Row.
9. 许京彩.高考小说阅读题的命题特点与解答技巧探析[J].散文百家(新语活页),2021(10):41-42.
10. 谢灵峰.坚持教考衔接回归学科本质——2024年高考语文试题微观分析及备考启示[J].教学考试,2024,(37):44-48.

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# Revisiting Decent Work in India: What Determines Employment Quality?

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## ABSTRACT

India has witnessed robust economic growth and structural transformation over the past two decades. Nevertheless, the quality of employment remains a pressing concern. In this context, this paper examines employment quality in India across rural-urban locations using key dimensions from the International Labour Organization's Decent Work framework: employment opportunities, stability and security and social security. This paper also seeks to identify the probable factors that could influence employment quality. The analysis is based on two types of datasets published by the Government of India: (i) disaggregated individual/unit-level data for the year 2009–10, and (ii) aggregated data for the years 2018–19 and 2023–24. The main findings of the paper is that the individual-level factors, such as age, gender, social identities, etc., are significant in explaining the variations in the quality of employment at the micro-level. Intriguingly, at the macro-level, aspects such as increase in overall economic activities, growth in organised sector activity, better governance, and flexible business regulatory environment either have no significant role or negatively influence employment quality.

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## I. INTRODUCTION

India's impressive economic growth trajectory and structural transformation over the past two decades have not translated into commensurate improvements in employment outcomes. While the economy has expanded consistently, employment growth has remained relatively modest, and a large share of new employment continues to be precarious, informal, and lack work-related securities. This phenomenon, often referred to as 'jobless growth,' has drawn considerable scholarly and policy attention (Basole et al., 2018; Kannan and Raveendran, 2012; Tejani, 2016). In recent years, although there have been modest improvements in employment, there has been an increase in self-employment, unpaid family labour and gig workers, indicating a deterioration in the condition of workers. (IHD and ILO, 2024)

In recent years, the quality of employment has become a central concern in discussions about labour market outcomes. The International Labour Organization's (ILO) Decent Work framework broadly covers the qualitative aspects of work/labour. It is built around four strategic pillars: rights at work, employment and income opportunities, social protection and social security, and social dialogue and tripartism (ILO, 2012). This framework is particularly relevant for a country like India, where high levels of informality, social and regional inequalities, and the rapid expansion of platform-based gig work pose significant challenges to securing decent employment.

While several studies have examined specific aspects of India's labour market, such as informality, wage disparities, or gender-based differences in access to work, there remains a lack of systematic, time-comparative analyses of employment quality across multiple dimensions (Belser and Rani, 2011; Bhalla, 2008; Bhaumik, 2013; IHD, 2014; Kantor et al., 2006; NCEUS, 2009; Papola, 2012; Papola and Sahu, 2012; Rao, 2011; Sakthivel and Joddar, 2006; Unni and Raveendran, 2007). While much of the literature highlights poor employment outcomes, relatively few studies investigate the underlying individual and structural level factors associated with these patterns.

This paper seeks to understand employment quality in India through a two-pronged analytical strategy. First, it examines broad trends in employment quality using the crucial indicators of

decent work, across 2009–10, 2018–19, and 2023–24. Next, we wish to identify the probable determinants that could influence employment quality, considering both individual-level characteristics and state-level development attributes.

By adopting this descriptive and exploratory approach, the paper aims to address critical gaps in the literature. It offers insights into how employment quality has evolved over time and across rural-urban locations, and which factors are most strongly associated with improved or deteriorated work conditions. In doing so, it also highlights emerging concerns, such as the informalization of formal jobs and the growth of platform-mediated work, which pose new challenges for employment security, legal recognition, and social protection.

The paper is organized as follows: Section 2 outlines the conceptual and methodological framework, drawing on the ILO's Decent Work agenda. The next two sections provide a descriptive analysis of employment quality trends and discussion of these findings. Section 5 explores the probable determinants of employment quality through confirmatory analysis. Finally, the last section presents the conclusion along with policy implications.

## II. METHODOLOGY

As mentioned above, this study adopts a multidimensional approach to assess the quality of employment in India, drawing upon the Decent Work framework proposed by the International Labour Organization (ILO). Three crucial dimensions of decent work are used for our analysis—'employment opportunity', 'stability and security of work' and coverage of 'social security'. These dimensions are also closely related to global development agendas. In particular, they correspond to Sustainable Development Goal (SDG) 8, which promotes sustained, inclusive, and decent work for all, as well as SDG 1, which focuses on expanding social protection.

For each of these dimensions, appropriate indicators have been selected based on ILO guidelines and the availability of relevant data in the Indian context. Proxy variables were constructed accordingly. Table 1 outlines the key dimensions of employment quality, the indicators adopted, and the variables used in the analysis.

**Table 1:** Key dimensions and variables used in the study

Sl. No.	Dimension (ILO)	Indicator (ILO)	Category	Variable used in analysis
1	Employment Opportunities	Employment-to-population ratio	Workforce participation	Workforce Participation Rate (WPR)
		Unemployment rate	Unemployment	Unemployment Rate (UR)
		Employment by status	Type of employment (self-employed, casual, regular)	Share (%) of self-employed, casual, and regular salaried/wage workers among all employed persons
2	Stability and Security of Work	Precarious employment	Job contract	Share (%) of regular salaried/wage workers with written job contracts out of total regular workers
3	Social Security	Coverage by pension and social protection schemes	Social security entitlements	Share (%) of regular salaried/wage workers eligible for social security benefits (e.g. PF, pension, gratuity, maternity benefits) out of total regular workers

Source: ILO (2012) table no-A: 16-17.

Employment opportunity is captured through the workforce participation rate (WPR), unemployment rate (UR), and distribution of employment status (self-employed, casual, and regular wage/salaried). Stability and security is proxied by the presence of written job contracts among regular wage/salaried workers. Social security coverage is assessed by examining the share of regular wage/salaried workers eligible for benefits such as provident fund, pension, gratuity, maternity entitlements, etc.

The study is based on the data published by National Sample Survey Office (NSSO), Government of India for three years 2009-10, 2018-19, and 2023-24. At first, we examine the quality of employment and its trends over time. Next, we try to find out the probable determinants that could influence employment quality. For this purpose, we rely on unit-level (individual-level) data from 2009-10. This period was selected as it reflects a phase of relatively high economic growth, providing a useful benchmark for understanding structural drivers of employment quality without short-term external shocks. In contrast, data from 2018-19 and 2023-24 reflect labour market outcomes under conditions of economic slowdown and pandemic-related disruptions, and are used

primarily for trend comparison and descriptive interpretation.

To examine the probable determinants of employment quality, the individual-level data of 2009-10, for fifteen major states within the working-age group 15-64 years have been used. The total number of working-age persons in our sample is 2,76,002 (1,71,002 in rural and 1,05,020 in urban areas). We have used the usual status data for all. The binomial and multinomial logistic regressions are applied to find out the probable determinants of the extent and variations of quality of employment (given in detail in section V). To find out the probable determinants of employment quality, different secondary sources has been used, such as the Annual Survey of Industries (ASI) by the Central Statistics Office (CSO), Planning Commission/NITI Aayog reports, the Population Census, and Governance quality indices from the Public Affairs Centre.

### III. DESCRIPTIVE TRENDS IN EMPLOYMENT QUALITY

A. Employment opportunities: Employment opportunities in India have undergone significant shifts over the past decade and a half, shaped by broader economic transitions,

policy reforms, and demographic pressures. Almost about half of the population (15 years and above) were working in India in 2009–10 (refer to Table 2). Although the participation rate had declined in 2018–19, it shows a clear upward trend in the most recent period. This recovery is more pronounced in rural areas, indicating a post-pandemic resurgence in labour market activity in rural areas.

Unemployment trends further reflect these labour market dynamics. With a sharp rise in 2018–19, the rates declined in 2023–24, particularly in rural areas (see Table 3). However, this could be largely distress-driven, as Covid-19 pandemic led to huge reverse migration pushing the workers into low-paid informal activities.

Moreover, this pattern is evident from the composition of employment. The workforce remains overwhelmingly dominated by self-employment (see Table 4). In rural areas, the share of self-employed workers has increased over time, reflecting either entrepreneurial activity or an increase in informal and low-productivity work. Urban areas, though initially showing a decline, also saw a rise in self-employment in the most recent year, an indication of the growing precarity even in non-agricultural labour markets. Meanwhile, the share of regular wage and salaried workers – often seen as the most secure and desirable form of employment – has shown only modest gains over time and has slightly declined in the latest period. This trend is particularly concerning in rural areas, where the scope of regular jobs is very limited. In contrast, casual labour has declined, especially in rural regions. While this appears positive, the simultaneous rise in self-employment suggests a potential substitution rather than a structural improvement in job quality.

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<sup>1</sup> Assam, Gujarat, Haryana, Kerala, Karnataka, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, West Bengal, Andhra Pradesh (including Telangana), Bihar (including Jharkhand), Madhya Pradesh (Chattisgarh) and Uttar Pradesh (Uttarakhand).

<sup>2</sup> The activity status (principal + subsidiary) on which a person spent a relatively long time during the 365 days preceding the date of the survey is considered as usual principal activity, and those who were engaged not less than 30 days during the reference year is considered as the usual subsidiary activity (NSSO 2011).

**Table 2:** Workforce participation rate in India

		2009-10	2018-19	2023-24
Locations (15 years & above)	Rural	59.5	48.9	62.1
	Urban	47.2	43.9	49.4
	Total	54.7	47.3	58.2

Source: NSSO (2011, p. 122-126), (NSO 2020, p. 50), NSSO (2024, p. 10)

**Table 3:** Unemployment rate in India

		2009-10	2018-19	2023-24
Locations	Rural	1.6	5	2.5
	Urban	3.4	7.7	5.1
	Total		5.8	3.2

Source: NSSO (2011, p.166-167), NSSO (2024, p.viii)

**Table 4:** Percentage of workers in usual status (ps+ss) by employment category in India

		2009-10	2018-19	2023-24
Rural	Self-employed	54.2	58	64.7
	Regular wage/salaried	7.3	13.4	12.7
	Casual workers	38.6	28.6	22.5
Urban	Self-employed	41.1	37.8	40.4
	Regular wage/salaried	41.4	48.7	47.5
	Casual workers	17.5	13.5	12.1
Total	Self-employed		52.1	58.4
	Regular wage/salaried		23.8	21.7
	Casual workers		24.1	19.8

Source: NSSO (2011, p.129-131), NSO (2020, p.53), NSSO (2024, p.13)

- B. **Stability & security of work:** Job stability remains a key concern in India’s labour market, even among regular wage and salaried workers who are typically seen as having better employment conditions (refer to Table 5). Although the share of regular workers having written contracts has increased modestly over time, a large share of workers are deprived of job contracts.
- C. **Social security:** The limited coverage of social security benefits further highlights the poor quality of employment in the

country. About half of the regular non-farm workers still lack access to benefits such as provident fund, pension, or health insurance (see Table 5). What is more concerning is the decline in social security coverage in 2023-24 compared to 2018-19, despite policy emphasis on expanding welfare provisions. This suggests a disconnect between employment growth and improvements in job quality.

Although workforce participation rates were higher in rural than urban areas, the majority of workers in rural areas were self-employed or

engaged in casual work compared to their urban counterparts. Moreover, the disparity between rural and urban regular workers is widening with respect to both written work agreements and access to social security benefits.

**Table 5:** Percentage of regular workers with written job agreements/contracts and coverage of social security in the non-farm sector in India

Locations	Indicators	Written job contracts			Social Security Benefits		
		2009-10	2018-19	2023-24	2009-10	2018-19	2023-24
Rural		39.6	32.2	38.9	42.7	44.1	41.2
Urban		35	29.5	44.3	47.1	50.6	50.6
Total		36.5	30.5	42	45.6	48.1	46.6

Source: NSSO (2012, p. 70), NSO (2020, p. 58), NSSO (2024, p.17)

#### IV. DISCUSSION

In this section, we try to provide some explanations in support of the above findings. In doing so, we aim to identify some probable factors that may affect the quality of employment in India. Further, these factors will be taken up as explanatory variables in explaining the variation in quality of employment in India in the next section, where we go for regression analysis.

The earlier findings reveal that although workforce participation has improved in recent years, particularly in rural areas, the overall quality of employment remains poor. A majority of workers continue to be engaged in self-employment or casual labour. Most disturbingly, even among regular wage and salaried workers, access to job contracts and social security remains limited. What is more concerning is that improvements in employment quantity are not matched by similar progress in employment stability or protection.

One of the fundamental reasons for poor employment quality in India is the lack of scope for formal employment (be it in the formal sector or informal sector). This is because, even in the formal sector, the overwhelming majority of the workers remain dependent on casual work. Only a small fraction of the labour force is engaged as regular workers with access to work-related securities. The remaining large segment of the labour force that the formal sector could not absorb is pushed to the

informal sector (both agricultural and non-agricultural). Within the informal sector, there is a huge section involved in self-employment-based activities, i.e. own account enterprises which tend to operate at low levels of productivity and earnings. The high incidence of self-employment and the decline in casual work may suggest a shift in employment type, but not necessarily an improvement in job quality. In many cases, self-employment acts as a fallback option in the absence of formal wage employment. These jobs often do not offer written contracts, social security, or legal protections, further contributing to the precarity of the workforce.

The poor working conditions in rural areas is mainly because the rural labour force is largely dependent on the under-remunerative agricultural activities for its livelihood (due to the low entry barrier), where the scope for quality employment is absent. The increase in employment in rural areas in recent years after Covid-19 pandemic is largely distress-driven, that they had no other option than to work any type of work (low income) for their livelihood.

The limited access to written job contracts and social security benefits, even among regular wage workers, suggests that informality has become deeply embedded in the structure of employment across both rural and urban areas. This informalization is not restricted to marginal sectors but is increasingly visible in segments traditionally considered part of the formal economy.

From a policy perspective, these patterns must also be seen in the context of India's shift towards a more liberalised and business-oriented regulatory environment. The mainstream argument is that to promote efficiency in production and distribution, there should not be much of restrictions on the mobility of factors of production. To make the factors of production mobile, entry and exit barriers should be minimised and "Ease of doing business" should be promoted. Thus, this mainstream argument proposes that as the markets are liberalised and capital is given the freedom to do business as per efficiency norms, not only growth will be ensured, but also there will be social welfare. However, critics argue that as the capitalists are given the freedom to do business, they have an inherent tendency to informalise some parts of their production chain to reduce their input costs (Chen 2007; Heintz and Pollin 2003). This informalization undermines labour protections, formal job creation, wage improvements, social security expansion, etc.

Thus, from the above discussions, we see that the persistence and spread of informality is one of the primary causes of poor employment quality in India. In addition, government policies, in terms of the business regulatory environment and labour regulations, might also influence employment quality. Hence, we try to find out the probable determinants of employment quality simultaneously using both the micro (such as age, gender, education, social identities, etc.) and macro-level factors (such as economic progress, growth in organised sector activity, quality of governance, better business regulatory environment and labour related compliance).

(Given in detail below in the next section)

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<sup>3</sup>Own-account enterprise (OAE): An enterprise is considered self-employed if it is operated without the engagement of any hired workers on a fairly regular basis (NSSO 2011,15).

## V. PROBABLE DETERMINANTS OF QUALITY OF EMPLOYMENT IN INDIA

First, we select three specific proxy variables for the three dimensions and try to find out their probable determinants. We design a dichotomous variable: “an individual is employed or not”, as a proxy for “employment opportunity”. This is represented by a variable “a worker is having written job contracts or not”. Next, we identify another variable: “a worker is eligible for social security benefits or not” for capturing “social security” coverage. In addition, we also use social dialogue as the fourth dimension of decent work, recognising its critical role in ensuring workers’ representation, negotiating power, and voice in labour relations, as emphasised in the ILO’s Decent Work framework. So, finally, we take “a worker is a member of a union or not” representing “social dialogue”. We introduce a binomial logistic regression model to see the probable effects of the relevant factors on these dichotomous variables.

Furthermore, for a deeper analysis, we take up the most crucial dimension – employment opportunity – and create a trichotomous variable on the nature of employment across the following categories: an individual is – (a) employed in an unorganised/informal sector, (b) employed in an organised/formal sector as an informal worker, (c) employed in an organised/formal sector as a formal worker. A multinomial logistic regression model is used to find out the probable factors explaining an individual’s ability/inability to attain one of these three options.

As mentioned above in the methodology section, we use 2009-10 individual level data sets for the confirmatory analysis.

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<sup>4</sup>The data on ‘social dialogue’ is not available in the PLFS data (i.e. for 2018-19 and 2023-24), so it is not included in the descriptive statistics section

<sup>5</sup>Most of the Indian literature uses the terms ‘informal sector’ and ‘unorganised sector’ synonymously because following the Indian definitions, there is very little difference between these two terms ‘Informal Sector’ and ‘Unorganised Sector’. According to NSSO, the Unorganised Sector includes all unincorporated proprietary and partnership enterprises (i.e. informal sector enterprises) plus enterprises run by co-operative societies, trusts, private and public limited companies (not included as factory under –Annual Survey of Industries as per Factories Act, 1948 of India). So, in this paper, we have used the terms informal sector and unorganised sector, interchangeably.

<sup>6</sup>For the organised sector, we have taken into account the Government/public sector enterprises. Furthermore, coverage of social security benefits among the workers is taken as a criterion to differentiate between the formal and informal workers within the organised sector, such that workers without social security benefits are considered to be informal workers within the formal sector.

The regression models used are given in the boxes below (Box 1 and 2).

**Box 1: The binomial logistic regression models**

Equation 1:

$$Y_{ii} = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{9i} + \beta_8 D_{1i} + \beta_9 D_{2i} + \beta_{10} D_{3i} + \beta_{11} D_{12i} + \beta_{12} D_{13i} + \beta_{13} D_{14i} + \beta_{14} D_{15i} + \beta_{15} D_{16i} + \beta_{16} D_{17i} + \mu_i$$

Equation 2:

$$Y_{2i} = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{7i} + \beta_7 X_{9i} + \beta_8 D_{1i} + \beta_9 D_{2i} + \beta_{10} D_{3i} + \beta_{11} D_{4i} + \beta_{12} D_{5i} + \beta_{13} D_{6i} + \beta_{14} D_{7i} + \beta_{15} D_{8i} + \beta_{16} D_{9i} + \beta_{17} D_{11i} + \beta_{18} D_{12i} + \beta_{19} D_{13i} + \beta_{20} D_{14i} + \beta_{21} D_{15i} + \beta_{22} D_{16i} + \beta_{23} D_{17i} + \mu_i$$

Equation 3:

$$Y_{3i} = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{8i} + \beta_7 X_{9i} + \beta_8 D_{1i} + \beta_9 D_{2i} + \beta_{10} D_{3i} + \beta_{11} D_{4i} + \beta_{12} D_{5i} + \beta_{13} D_{6i} + \beta_{14} D_{7i} + \beta_{15} D_{8i} + \beta_{16} D_{10i} + \beta_{17} D_{11i} + \beta_{18} D_{12i} + \beta_{19} D_{13i} + \beta_{20} D_{14i} + \beta_{21} D_{15i} + \beta_{22} D_{16i} + \beta_{23} D_{17i} + \mu_i$$

where  $i=1,2,3,\dots,n$

**Box 2: The multinomial logistic regression model**

Equation 4:

$$Y_{4i} = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{9i} + \beta_8 D_{1i} + \beta_9 D_{2i} + \beta_{10} D_{3i} + \beta_{11} D_{12i} + \beta_{12} D_{13i} + \beta_{13} D_{14i} + \beta_{14} D_{15i} + \beta_{15} D_{16i} + \beta_{16} D_{17i} + \mu_{ii}$$

where  $i=1,2,3,\dots,n$

The details of the variables (both quantitative and qualitative), the explanation for considering these variables and the expected sign of the regression coefficients are given below in Table 6. The mean and standard deviation of the quantitative variables are presented in Table 1A

**Table 6:** Details of the variables, explanations for considering these variables and expected signs of the regression coefficients<sup>1</sup>

Block no	SI no	Variable name	Details of variables	Explanation for considering the variables	Expected signs
<b>Regressands</b>					
1	1	$Y_{1i}$	An $i^{th}$ individual is employed or not	as mentioned before at the beginning of this section (first paragraph)	NA
	2	$Y_{2i}$	An $i^{th}$ worker is eligible for social security benefits or not		
	3	$Y_{3i}$	An $i^{th}$ worker is a member of a union or not		
	4	$Y_{4i}$	An $i^{th}$ individual is employed in the informal sector, or, employed in the formal sector as an informal worker, or employed in the formal sector as a formal worker		
<b>Regressors</b>					
<b>Individual-level quantitative variables</b>					
2	5	$X_{1i}$	Age of the $i^{th}$ individual in years	with an increase in age, an individual is supposed to gain experience, which may improve employment quality	+
	6	$X_{2i}$	Level of education of the $i^{th}$ individual in years	education is a means to self-development; as the educational level of an individual rises, opportunities for quality employment may also increase	+
<b>macro-level quantitative variables (at the sub-national state level)</b>					
3	7	$X_{3i}$	Net State(sub-national) domestic Product (NSDP) per capita (in rupees)- a proxy for macroeconomic activities	a proxy for the general strength of the macroeconomy needed to generate quality jobs	+

<sup>1</sup> Following literature (Jonasson, 2012; Muktan and Chakrabarti, 2024), and our above analysis.

	8	$X_{4i}$	Gross Value Added (GVA) of the organised sector (manufacturing and service) (in rupees) as a share of NSDP (in rupees)- a proxy for organised sector activities	share of organised sector in the macroeconomy needed for a quality job in the formal sector	+
	9	$X_{5i}$	Public Affairs Index <sup>2</sup>	better governance in terms of social and physical infrastructure, and a free and fair socio-economic environment, could induce employment quality through both demand and supply side support	+
	10	$X_{6i}$	Workforce participation rate	overall employment opportunity at the state level should influence the individual level as well	+
	11	$X_{7i}$	Share of workers eligible for social security benefits	the general condition of social security benefits at the state level should have a bearing at the individual level as well	+
	12	$X_{8i}$	Share of workers having unions/associations in their activity	existence of unions/associations at the state level may give greater scope to an individual to join a union	+
	13	$X_{9i}$	Population size	size of the population, especially beyond a maximum threshold level, may lead to congestion and hence a drag on the quality of employment	-
Individual-level qualitative variables					
	14	$D_{1i}$	Dummy for gender of $i^{\text{th}}$ individual: if male=1, otherwise (i.e. female) =0	males compared to females can have better employment opportunities given the social and economic environment	+
4	15	$D_{2i}$	Dummy for vocational training of $i^{\text{th}}$ individual (e.g. carpentry, sewing, fitter etc.):  if trained=1, otherwise=0	Although employment opportunities might be higher for individuals with such training in comparison to non-trained individuals, these types of skills usually give rise to informal employment, resulting in poor employment quality	-

<sup>8</sup>Public affairs index is developed by Public Affairs Centre, Bangalore, India (2017, 28) to measure the quality of Governance of Indian states, by taking ten broad themes, such as essential infrastructure, support to human development, social protection, support to women and children, crime, law and order, delivery of justice, natural environment, transparency and accountability of the Government, fiscal management and economic freedom. Based on these ten broad themes, scores are given to each state.(see Table 2A)

16	$D_{3i}$	Dummy for technical education of $i^{th}$ individual (e.g. technical degree in agriculture, engineering etc.): If technically educated=1, otherwise=0	individuals with technical education may get better employment opportunities than others	+
17	$D_{4i}$	Dummy for establishment size where $i^{th}$ individual is working: if enterprise is running with more than 10 workers=1, otherwise=0	Workers in big-size establishments may have better employment conditions, particularly in terms of the strength of their voice.	+
18	$D_{5i}$	Type I dummy for enterprise where $i^{th}$ individual is working: if working in government/public sector=1, otherwise (i.e. proprietary, partnership, employer household, co-operative societies/ trusts/non-profit institutions, public/private limited company)=0;	individuals working in the government/public sector, public/private limited companies can have quality employment than others	+
19	$D_{6i}$	Type II dummy for enterprise where $i^{th}$ individual is working: if working in public/private limited company =1, otherwise=0		
20	$D_{7i}$	Type I dummy for the sector in rural areas where $i^{th}$ individual is working (for regression equations 3 and 5): if working in secondary and tertiary sector=1, otherwise=0	workers in the secondary and tertiary sector can have better quality employment than those engaged in the primary sector which is mainly dominated by agriculture	+
21	$D_{8i}$	Type II dummy for sector in urban areas, where $i^{th}$ individual is working (for regression equations 4 and 6): if in tertiary sector=1, otherwise (in secondary sector)=0	the service sector is the largest and fastest growing sector in India and has the highest labour productivity <sup>3</sup> , which may have a bearing on the quality of employment compared to other sectors	+
22	$D_{9i}$	Type I dummy for category of work of $i^{th}$ individual (for regression equations 3-4): regular salaried/wage workers=1, otherwise (casual workers)=0	regular workers have more privileges than casual workers in terms of work-related securities, such as social security benefits, stability of work etc.	+
23	$D_{10i}$	Type II dummy for category of work of $i^{th}$ individual (for regression equations 5-6): regular salaried/wage workers and self-employed=1, otherwise=0	quality of employment in terms of unionization may be higher among regular workers and self-employed than casual workers	+

<sup>9</sup>Mukherjee (2013, 3-5)

	24	$D_{11i}$	Dummy for work status of $i^{th}$ individual: full-time=1,otherwise=0	full-time workers can have better employment quality than part-time	+
	25	$D_{12i}$	Dummy for social-group of $i^{th}$ individual: if Upper caste=1, SCs,STs and OBCs=0	Upper caste in comparison to the marginalised can have better employment opportunity given the social and economic environment	+
	26	$D_{13i}$	Dummy for religion of $i^{th}$ individual: if hindus=1,otherwise=0	hindus in comparison to other religions may have better employment opportunity given the social environment	+
macro-level qualitative variables (at the sub-national state-level)					
5	27	$D_{14i}$	Type I dummy for overall business regulatory environment <sup>4</sup> : if business regulatory environment is good=1, otherwise (i.e. medium and inferior)=0	this may improve quality of employment through demand and supply side inducements, as a better regulatory environment is supposed to induce formal business	+
	28	$D_{15i}$	Type II dummy for the overall business regulatory environment: if business regulatory environment is medium=1, otherwise (good and inferior)=0		
	29	$D_{16i}$	Type I dummy for labour law related compliance <sup>5</sup> : if labour law related compliance is good=1, otherwise (i.e. medium and inferior)=0	obviously, for work-site protections and social security benefits for the workers too, maintenance of labour law is extremely essential	+
	30	$D_{17i}$	Type II dummy for labour law related compliance: if labour law related compliance is medium=1, otherwise (i.e. good and inferior)=0		

<sup>10</sup>The business regulatory environment for manufacturing units has been assessed at the sub-national state-level by the Planning commission, Government of India (2014,7), taking six parameters - (i) finance & tax related compliances, (ii) labour law related compliances, (iii) infrastructure & utility related approvals, (iv) land & building related approvals, (v) environmental clearances and (vi) other business regulatory compliances. (see Table 2A)

<sup>11</sup>As mentioned in footnote 10, the labour law related compliance is one of the parameters taken to assess the business regulatory environment for manufacturing units by the Planning Commission, Government of India (2014, 34), which covers the following: (a) time taken and effectiveness of the process for initial registration by manufacturing units under Factories Act for obtaining factory license and subsequent renewal; (b) time taken and effectiveness of the process for compliance related to other Labour Laws like Contract Labour (Regulation & Abolition) Act, Payment of Wages Act, etc. applicable in respective states.

A. Binomial logistic regression results: The regression results (1 to 6) given in Table 7 show that the individual-level factors, which are supposed to influence the quality of employment in India, are mostly in line with our expectations. However, contrary to our expectations, the level of education has a negative impact on employment opportunities, though it has a significant positive influence on social security and social dialogue. The underlying reason could be the dominance of low-quality employment, mostly in the agriculture and informal sector (as mentioned above). So, majorly individuals with little or no education are employed, while those with a higher level of education may prefer to remain unemployed or even withdraw from the labour market (especially women), than being engaged in inferior non-remunerative works with low work-related securities. This result is in support of the literature (Bairagya 2018).

As far as the macro-level factors are concerned, the results seem to be disturbing:

- The increase in the overall macroeconomic activities, has a significant negative influence on the employment opportunity, while having no significant impact on stability and security of work (in both rural-urban areas), social security (in both areas) and social dialogue (in urban areas).
- Although the expansion of the organised sector has a significant positive influence on employment opportunity (in both rural-urban areas), stability and security of work (in urban areas) and social dialogue (in rural areas), it either has no significant impact or even negatively influences social security (in urban areas).
- Besides, quality of governance either has no significant role or negatively influences employment opportunities (in urban areas), stability and security of work, social security and social dialogue (in general).
- The overall business regulatory environment either has no significant role or negatively influences employment opportunities (in urban areas), social security and social dialogue (in general).
- Furthermore, better labour law related compliance also has a significant negative impact on stability and security of work, social security and social dialogue (in urban areas),

though it positively influences employment opportunities.

These results (a to d) on macro-level factors might suggest that:

- Economic growth alone is not sufficient to improve the quality of employment. Separate institutional intervention is essential to ensure employment quality.
- Expansion of the organised sector spreads informality – different types of contractual jobs – more than the spread of formal jobs. Hence, the expansion of the organised sector adversely affects the overall standard of social security.
- The government policies perhaps are favouring the big corporate houses, presumably for enhancing economic growth (as mentioned above). Capitalists driven by accumulation motive use capital-intensive technologies and are in favour of labour flexibility. Consequently, this reduces demand for labour, adversely affects the overall work environment and also weakens the voice of workers, leading to a lack of quality of employment.

Table 7: The binary logistic regression estimates

Dependent Variables	Employment opportunity (Y <sub>2i</sub> )		Stability and security (Y <sub>3i</sub> )		Social Security (Y <sub>4i</sub> )		Social dialogue (Y <sub>5i</sub> )	
	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
No of observations	96823	52887	21217	23789	21195	23149	10054	12528
Pseudo R2	0.27	0.23	0.47	0.37	0.58	0.58	0.11	0.09
Independent variables								
age (X <sub>1i</sub> )	0.16***	0.16***	0.02***	0.02***	0.07***	0.05***	0.02***	0.03***
gender (D <sub>1i</sub> )	0.63***	0.88***	-0.54* *	-0.10**	0.36***	0.11	0.66***	0.60***
levels of education(X <sub>2i</sub> )	-0.332* **	-0.24** *	0.14***	0.14***	0.19***	0.22***	0.05***	0.07***
vocational training (D <sub>2i</sub> )	0.07	0.18***	-0.12	-0.14**	-0.15*	-0.14**	-0.09	0.05
technical education (D <sub>3i</sub> )	-0.79** *	-0.17**	0.07	0.28***	0.135	0.53***	0.04	0.01
establishment size (D <sub>4i</sub> )			0.48***	0.47***	1.03***	1.28***	0.14**	0.17**
type I enterprise (D <sub>5i</sub> )			2.27***	1.95***	2.35***	3.01***	0.93***	0.63***
type II enterprise (D <sub>6i</sub> )			1.15***	1.08***	1.01***	1.16***	0.08	0.29***
type I sector (D <sub>7i</sub> )			-0.64* **		0.42**		-0.01	
type II sector (D <sub>8i</sub> )				-0.28**		-0.05		-0.28** *
type I category of work (D <sub>9i</sub> )			2.07***	1.82**	2.43***	2.43***		
type II category of work (D <sub>10i</sub> )							0.69***	0.39***
work status (D <sub>11i</sub> )			0.25	0.55***	0.97**	1.79***	0.56**	0.73**
social-group (D <sub>12i</sub> )	-0.12**	0.44	0.06	0.01	-0.01	0.16**	0.18***	0.13**
religion (D <sub>13i</sub> )	0.27***	0.003	0.090	0.19***	0.23***	0.08	0.17**	0.14**
NSDP_per capita(X <sub>3i</sub> )	-0.000 04***	-0.000 01***	-5.95	-4.50	3.17	3.59	.00002 ***	2.93
GVA in organised sector/NSDP (X <sub>4i</sub> )	11.26***	5.40***	-0.209	3.56***	-1.54	-2.49**	4.85**	0.01
public affairs index (X <sub>5i</sub> )	4.28***	1.75	-2.53* *	-2.65** *	1.12	0.945	-8.17***	-1.61
type I overall business regulatory environment (D <sub>14i</sub> )	0.66***	0.15	0.67***	0.43***	-0.36**	-0.07	-0.65** *	-0.30** *
type II overall business regulatory environment (D <sub>15i</sub> )	0.72***	0.14	0.83** *	0.61***	-0.37** *	0.05	-0.73** *	-0.29**

type I labour law related compliance ( $D_{16i}$ )	0.25***	0.22***	-0.37**	-0.33**	-0.06	-0.15**	0.45***	-0.04
type II labour law related compliance ( $D_{17i}$ )	-1.15***	-0.54**	-0.79**	-0.331**	0.03	0.17	1.13***	0.85***
workforce participation rate ( $X_{6i}$ )	0.06***	0.07***						
stability and security ( $X_{7i}$ )			0.02***	0.01**				
social security benefits ( $X_{8i}$ )					0.02***	0.03		
unions/associations in activity ( $X_{9i}$ )							0.03***	0.004
Population size ( $X_{10i}$ )	-2.31***	2.30***	1.81**	-2.81**	-1.74	-2.97	-2.32	2.14
constant	-11.49**	-7.80**	-1.97*	-9.05**	-9.54**	-8.93**	-3.48**	-1.85

Note: \*, \*\* and \*\*\* imply significance at 1, 5 and 10 per cent levels, respectively

B. Multinomial logistic regression results: Table 8, presenting our regressions (7 to 8), illustrates almost similar results to that of binomial logistic estimates for both individual and macro-level factors. As such, most of the individual-level factors that affect the quality of employment are in line with our expectations. However, exceptionally, females than males, and the marginalised than the other categories, are more likely to be employed in the organised sector – both as a formal and informal workers – than being employed in the unorganised sector. As far as males being engaged mainly in the unorganised sector is concerned, this could be because, traditionally, they are considered as the main income provider of the family, so they might have no other options than to join the unorganised sector if not employed in the organised sector. While females, in the absence of quality jobs, might opt out of labour market

participation and engage in domestic economies (Naidu and Ossome, 2018). Additionally, educated SC-STs might be getting employment opportunities in the organised sector due to the existing reservation (quota) policy in India.

C. On the other hand, macro-level factors show different results than our expectations (as in the case of binomial logit regressions). Most disturbingly, the results indicate that with improvement in 'economic activities', 'good governance', 'better business regulatory environment' and 'labour law related compliance', employment in the organised sector, particularly formal employment, is likely to be affected adversely, in comparison to employment in the unorganised sector.

<sup>12</sup> Support for our explanation could also be found in Naidu and Ossome (2018).

<sup>13</sup> Our empirical results based on unit-level data are also supported by the following anecdotal evidence on Indian states: the economically developed states such as Gujarat, Tamil Nadu etc., which also ranks higher in terms of quality of governance and better regulatory environment (Table 2A), have a low quality of employment both in terms of coverage of social security and scope for social dialogue. More strikingly, this is true for the regular workers who are assumed to be the most privileged.

**Table 8:** The multinomial logistic regression estimates (reference category: “individual is employed in the unorganised sector”)

Dependent Variable	Employment opportunity ( $Y_{4i}$ )			
	Rural		Urban	
No of observations	25117		27881	
Pseudo R square	.299		.276	
	Reg. 7a	Reg. 7b	Reg.8a	Reg. 8b
<i>Dependent variables</i>	<i>informal worker in organised sector</i>	<i>formal worker in organised sector</i>	<i>informal worker in organised sector</i>	<i>formal worker in organised sector</i>
<i>Independent variables</i>				
age ( $X_{1i}$ )	0.03***	0.11***	0.02***	0.11***
gender ( $D_{1i}$ )	-1.88***	-0.79***	-0.82***	-0.37***
levels of education ( $X_{2i}$ )	0.19***	0.54***	0.09***	0.39***
vocational training ( $D_{2i}$ )	-0.51***	-0.57***	-0.37***	-0.34***
technical education ( $D_{3i}$ )	0.33**	0.31***	0.08	0.09
Social-group ( $D_{12i}$ )	-0.16**	-0.09**	-0.31***	-0.38***
religion ( $D_{13i}$ )	0.14*	0.23***	0.17	0.16***
NSDP_per capita( $X_{3i}$ )	-0.00004** *	-0.00001** *	-0.00003***	-0.00001***
GVA in organised sector/NSDP ( $X_{4i}$ )	11.83***	9.85***	12.23***	8.91***
public affairs index ( $X_{5i}$ )	1.49	-4.07***	-2.84	-3.06***
type I overall business regulatory environment ( $D_{14i}$ )	0.35***	-0.08	0.16	-0.24***
type II overall business regulatory environment ( $D_{15i}$ )	0.11	0.05	0.16	0.03
type I labour law related compliance ( $D_{16i}$ )	-0.09	0.01	-0.26***	0.16**
type II labour law related compliance ( $D_{17i}$ )	-0.20	0.08	-0.46***	0.22**
workforce participation rate ( $X_{6i}$ )	0.01	0.04***	-0.02	-0.04***
population ( $X_{9i}$ )	-1.65*	-4.49***	-4.88***	-5.14***
constant	-12.5***	-16.32***	-9.97***	-11.66**

Note: \*, \*\* and \*\*\* imply significance at 1, 5 and 10 per cent levels, respectively.

## VI. CONCLUSION

The main concern of the article has been to recognize and explain why quality of employment in India is poor, despite a consistently high rate of economic growth. In this context, this paper analyses quality of employment in India and over time trends across rural-urban areas, using crucial dimensions as proposed by ILO. Most importantly, this study examines the probable determinants – considering simultaneously both micro and macro level factors – that could explain the lack of quality of employment.

The findings suggest that although the workforce participation has improved in recent

years, particularly in rural areas, the overall quality of employment remains a matter of concern. The majority of the workers are concentrated in self-employment and informal activities, often without written contracts or access to social security. Moreover, the conditions of a large segment of regular salaried/wage workers (i.e. the most privileged category) is awful. The majority of them are engaged in those jobs without written job contracts and social security coverage.

Furthermore, the confirmatory analysis suggests that although the individual level factors play a positive role on employment quality, the macro-level aspects such as ‘economic progress’, ‘good governance’, and ‘better business regulatory

environment', are perhaps not contributing in any substantial way to the quality of employment. By and large, our study indicates that economic growth is not sufficient for improvement in the quality of employment. Indeed, the pattern of economic growth in India undermines the quality of employment. To address these challenges, future policy must shift its emphasis from merely increasing employment numbers to enhancing the quality of jobs. This requires strengthening social protection systems, expanding coverage to informal and gig workers. Additionally, improving labour regulation and enforcement mechanisms through digital tools, audits, and transparency alongside integrating social dialogue and worker representation is essential. Skill development programmes must be better aligned with the quality and formalisation of work, especially in emerging sectors. Ultimately, a more integrated and inclusive policy framework is needed, one that embeds employment quality within the broader agenda of inclusive and sustainable development.

## VII. DECLARATION OF CONFLICTING INTERESTS

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## IX. REFERENCES

- Bairagya, I. (2018). Why is Unemployment Higher among the Educated?. *Economic and Political Weekly* 53 (7): 43-51
- Basole, A., Jayadev, A., Shrivastava, A., & Abraham, R. (2018). *State of Working India 2018*. Centre for Sustainable Employment, Azim Premji University. Available at: [https://cse.azimpremjiuniversity.edu.in/wpcontent/uploads/2019/02/State\\_of\\_Working\\_India\\_2018-1.pdf](https://cse.azimpremjiuniversity.edu.in/wpcontent/uploads/2019/02/State_of_Working_India_2018-1.pdf) (accessed on 20 July 2020)
- Belser, P., and Rani, U. (2011). Extending the Coverage of Minimum Wages in India: Simulations from Household Data. *Economic and Political Weekly* XLVI (22): 47-55
- Bhalla, G. S. (2008). Globalization and Employment trend in India. *The Indian Journal of Labour Economics* 51(1): 1-23
- Bhaumik, S. K. (2013). The Changing Employment Scenarios in Rural India in the Era of Economic Reform. *The Indian Journal of Labour Economics* 56(3): 349-371.
- Chen, M. (2007). Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment. DESA Working Paper No. 46. Department of Economic Social Affairs United Nations. (accessed on 20th January 2022)
- Heintz, J., and Pollin, R. (2003). Informalization, economic growth and the challenge of creating viable labor standards in developing countries. Working paper series 60. University of Massachusetts, Amherst: Political Economy Research Institute.
- Institute for Human Development (IHD), & International Labour Organization (ILO). (2024). *India employment report 2024: Youth employment, education, and skills*. New Delhi: IHD & ILO.
- IHD. (2014). *India labour and Employment Report 2014*. New Delhi: Academic foundation India.
- ILO (International Labour Organisation). (2012). *Decent Work Indicators: Concepts and Definitions*. Geneva: ILO.
- ILO. (2008). *Decent Work Indicators for Asia and the Pacific: A Guidebook for Policy-Makers and Researchers*. Bangkok: Regional Office for Asia and the Pacific ILO.
- Jonasson, E. (2012). Government Effectiveness and Regional Variation in Informal Employment. *Journal of Development Studies* 48 (4): 481-497
- Kannan, K. P., and Ravendran, G. (2012). Counting and Profiling the Missing Labour Force *Economic and Political Weekly* XLVII(6):77-80.
- Kantor, P., Rani, U., and Unni, J. (2006). Decent Work Deficits in Informal Economy: Case of Surat. *Economic and Political Weekly* XLI(21): 2089-2097
- Ministry of Human Affairs. (2014). *Population Census 2001 and 2011*. New Delhi: Government of India. Accessed November 27 2014. [www.censusindia.gov.in](http://www.censusindia.gov.in).
- Moktan, A., and Chakrabarti, S. (2024). Decent work deficit in India: Deterioration and determinants. *The Economic and Labour Relations Review*.35(3):708-729. doi:10.1017/elr.2024.43

17. Mukherjee, A. (2013). The Service Sector in India. ADBE Working Paper No.352. Philippines:Asian Development Bank Economics.
18. Naidu, S. C., and Ossome, L. (2018). Work Gender and Immiseration in South Africa and India. *Review of Radical Political Economics* 50 (2): 332-348
19. NCEUS (National Commission for Enterprises in the Unorganised Sector). (2009). *The Challenge of Employment in India an Informal Perspective*. Volume 1. New Delhi:Government of India.
20. National Sample Survey Office (NSSO). (2011). *Employment and Unemployment Situation in India 2009-10*. New Delhi: Government of India.
21. NSSO. (2012). *Informal Sector and Conditions of Employment in India, 2009-10*. New Delhi: Govt. of India.
22. National Statistic Office. (NSO). (2020) *Annual Report: PLFS July 2017-June 2018*. New Delhi: Government of India.
23. NSSO. (2024). *Annual Report: Periodic labour force Survey (PLFS) July 2023-June 2024*. New Delhi: Government of India.
24. Papola, T. S. (2012). *Employment growth in the post-reform period*. ISID working paper 2012/07. New Delhi: Institute for Studies in Industrial Development.
25. Papola, T. S., and Sahu, P. P. (2012). *Growth and Structure of Employment in India: Long-Term and Post-Reform Performance and the Emerging Challenge*. New Delhi: Institute for Studies in Industrial Development.
26. Planning Commission Government of India. (2014). *Survey on Business Regulatory Environment for Manufacturing—State Level Assessment*. New Delhi:India: Deloitte Touche Tohmatsu India Private Limited.
27. Public Affairs Centre. (2017). *Public Affairs Index: Governance in the States of India 2017*. Bangalore India
28. Rao, S. (2011). *Work and Empowerment: Women and Agriculture in South India*. *The Journal of Development Studies* 47(2): 294-315
29. Sakthivel, S., and Joddar, P. (2006). *Unorganised Sector Workforce in India. Trends Patterns and Social Security Coverage*. *Economic and Political Weekly* XLI(21) 2107-2114.
30. Tejani, S. (2016). *Jobless growth in India: An investigation*. *Cambridge Journal of Economics*, 40: 843-870. <https://doi.org/10.1093/cje/bev025>
31. Unni, J., and Raveendran, G. (2007). *Growth of Employment (1993-94 to 2004-05): Illusion of Inclusiveness*. *Economic and Political Weekly* XLII (03):196-99

**APPENDIX**

**Table 1A:** Mean and Standard deviation values of the quantitative variables

Variables	Observation	Mean	Std-deviation	Min.	Max.
Age of individuals in years ( $X_{1i}$ )	276022	34.57133	13.17169	15	64
Levels of education of individuals in years ( $X_{2i}$ )	275987	6.213351	3.55032	1	13
NSDP per capita (in Rupees) ( $X_{3i}$ )	276022	32428.3	13804.31	9820.18	53950.05
GVA of organised sector as a share of NSDP (in Rupees) ( $X_{4i}$ )	276022	0.8127428	0.0309052	0.74	0.86
Public affairs index ( $X_{5i}$ )	276022	0.474028	0.0498853	0.355	0.551
Workforce participation rate (in %) ( $X_{6i}$ )	276022	38.20235	4.847741	26.75	44.25
Workers eligible for social security benefits (in %) ( $X_{7i}$ )	276022	25.6924	6.856763	16.6	43.9
Workers having unions in their activity (in %) ( $X_{8i}$ )	276022	22.14417	11.0752	11.7	59.2
Population of states ( $X_{9i}$ )	276022	8.45E+07	5.16E+07	1.01E+07	2.00E+08

Source: Calculated based on NSSO report, ASI report, RBI website, population census & Public affairs centre report

Note: NSDP: Net state Domestic Product; GVA: Gross value added (manufacturing and service sector)

**Table 2A:** Public affairs index scores, Ranking based on business regulatory environment and percentage of regular workers having social security benefits and unions in their activity status

Sl no	States	public affairs index	regulatory environment ranking	social security benefits		unions in activity status	
				rural regular workers	urban regular workers	rural regular workers	urban regular workers
1	Gujarat	0.536	1	38.5	40	45.1	36.6
2	Haryana	0.464	1	41.2	34.1	35.4	33.1
3	Maharashtra	0.512	2	56.1	47.8	45.7	33.8
4	Punjab	0.497	2	34.7	41.2	29.1	36.5
5	Tamil Nadu	0.543	1	38.5	44	45.3	39.2
6	Andhra Pradesh	0.467	1	28.5	39.2	33.4	34.8
7	Karnataka	0.531	2	36.4	47.2	30.1	31.3
8	Kerala	0.551	1	42.5	55.5	58.7	56.3
9	West Bengal	0.459	2	23.9	54.4	45.5	51.3
10	Assam	0.438	3	69.9	81.6	78.6	85.2
11	Bihar	0.355	2	46.8	59	59.5	56.3
12	Madhya Pradesh	0.457	1	54.2	55.6	41.3	48.8
13	Orissa	0.431	1	60.1	64.6	63.5	66.6
14	Rajasthan	0.473	1	36.5	44.6	39.3	41.5
15	Uttar Pradesh	0.441	2	41.3	51.8	39.9	43.6
	India			42.7	47.1	45.2	40.5

Source: Public affairs centre report (2017), Planning Commission report (2014), NSSO report (2011)

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