

Workers' awareness context in Italian 4.0 factories

Valeria Cirillo^a Matteo Rinadini^b Jacopo Staccioli^c
Maria Enrica Virgillito^{d,c}

^a*INAPP, Rome, Italy*

^b*Università degli Studi di Modena e Reggio Emilia, Italy*

^c*Scuola Superiore Sant'Anna, Pisa, Italy*

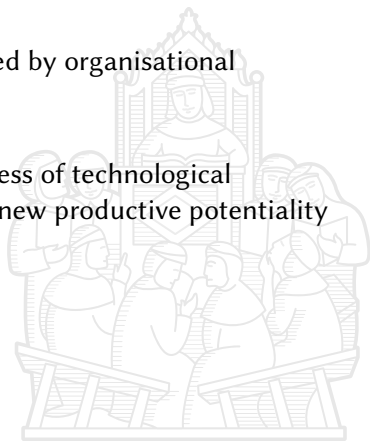
^d*Università Cattolica del Sacro Cuore, Milan, Italy*

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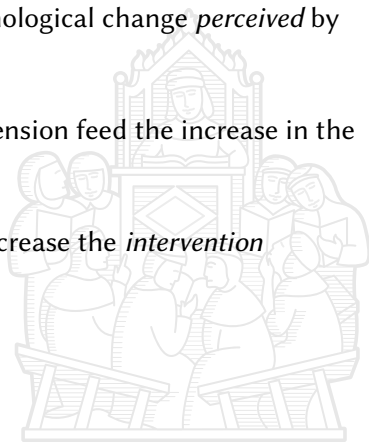


- technological innovations are accompanied by organisational innovations
- the higher the degree of workers' awareness of technological innovation the higher the exploitation of new productive potentiality



The research questions

- 1 to what extent and in what sense is technological change *perceived* by the workforce within the workplace?
- 2 in what way does the organisational dimension feed the increase in the *awareness* of change by the workforce?
- 3 and in what sense does this awareness increase the *intervention authority* of the subjects?



Grounded theory

“the total combination of what specific people, groups, organisations, communities or nations know what about a specific issue”

[Glaser and Strauss, 1964]

Theory of the firm

after all, the well functioning of an organisation is not simply based on employees' obedience, but rather on *“[e]mployees taking initiative and applying all their skill and knowledge to advance the achievement of the organisation's objectives”*

[Simon, 1991]

how to open the awareness context?

autonomy production of own rules

discretion variable margin of action within a regulated process



Autonomy and discretion

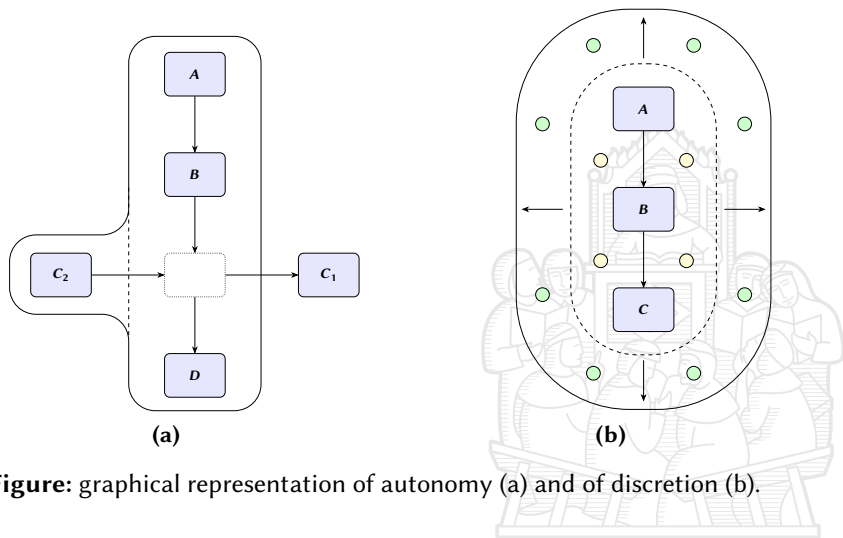


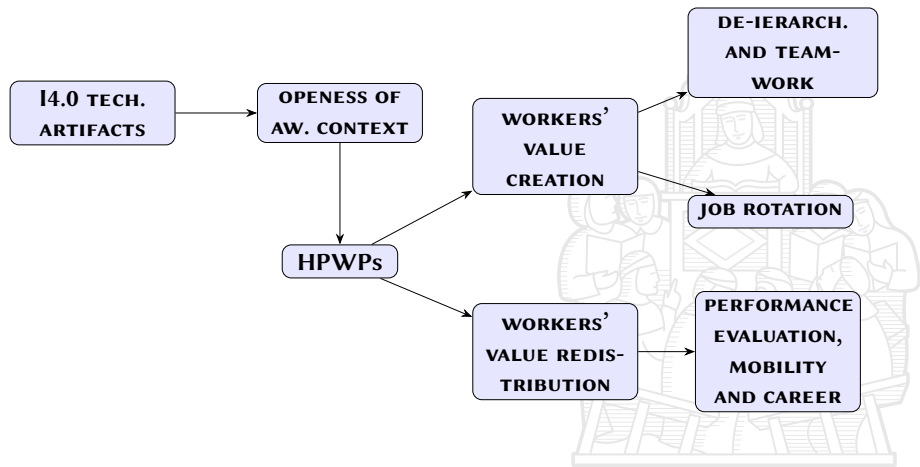
Figure: graphical representation of autonomy (a) and of discretion (b).

structural conditions of the awareness context

- 1 de-hierarchisation and development of team-work
- 2 job rotation practices
- 3 performance evaluation, mobility and career systems



The research design flow



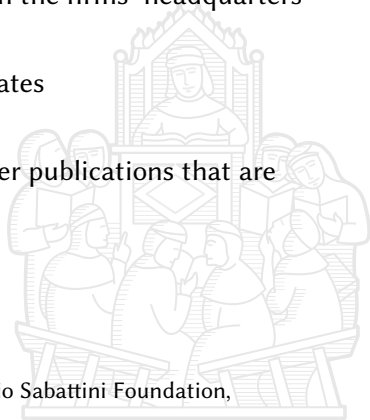
Case-study firms

Cesab-Toyota	Japanese Toyotism
Ducati	mix of Taylorism and co-determination
Lamborghini	German ' <i>Mitbestimmung</i> '



Field work activity *

- 31 interviews to workers conducted within the firms' headquarters
- 6 interviews to managers
- a focus group with firm-level union delegates
- a tour of all the production plants
- collection of business documents and other publications that are relevant to the present research



*spillover of a research project coordinated by Claudio Sabattini Foundation, commissioned by FIOM-CGIL (Bologna)

structure of teams and team-work meetings

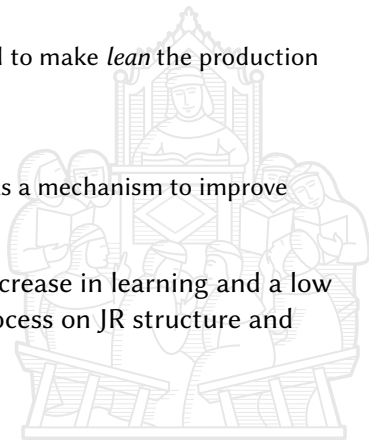
- widespread but high degree of heterogeneity within and between firms
- little say on the structure of the team
- little say on procedures and timing of meetings

role and functions of the team leader

- hybrid, non-hierarchical figure
- from high-skill worker (*primus inter pares*) to a motivator (soft skills)
- conflict between formal de-hierarchisation and *de facto* new hierarchisation

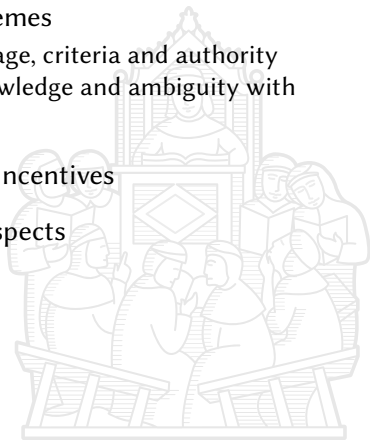


- widespread but high degree of heterogeneity within and between firms
- achievement of direct objectives
 - workers acknowledge JR is implemented to make *lean* the production system and to make them substitutable
- partial achievement of indirect objectives
 - workers only partially acknowledge JR as a mechanism to improve *learning* and *ergonomy*
- perceived conflict between an effective increase in learning and a low degree of participation in the decision process on JR structure and application



Performance evaluation, mobility, and career

- joint presence of different evaluation schemes
 - high degree of variability in terms of usage, criteria and authority
 - even when more formalised, lack of knowledge and ambiguity with respect to monetary awards
- high degree of arbitrariness in monetary incentives
- high degree of arbitrariness in career prospects
 - disciplinary usage

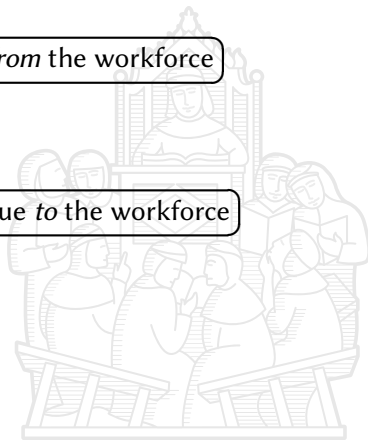


Finding I – misalignment between HPWPs

practices meant to **extract** value *from* the workforce

vis-à-vis

practices meant to **redistribute** value *to* the workforce



Finding II – hybrid increase in intervention authority

- opening up of worker awareness context
- increase in discretion characterized by within and between firms heterogeneity
- no increase in autonomy



Failure or success of the lean model?

...wrong question!

institutional perspective: conflicting organisational cultures

cultural delay

dynamic capabilities perspective: tension between organisational routines in place and prospect of change

lean enough



Thank you very much!

[j.staccioli<at>santannapisa.it](mailto:j.staccioli@santannapisa.it)

...and props to the kind organisers of this Conference

