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The rubber band effect: Managing the stability-change paradox in routines

--Manuscript Draft--

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Abstract:	<p>Organizational routines embody the stability-change duality: for routines to be consistent, actors performing them must improvise to adjust to changing conditions. While these interdependent aspects are often intuitively navigated by organizational actors, sometimes they can manifest as contradictory, paradoxical requirements. Using a paradox lens, this paper explores how individuals deal with tensions as they oscillate between preserving and altering routines. Building on an ethnography of an emergency room, we unpack routine dynamics and identify three tensions with paradoxical attributes: learning vs. efficiency, flexibility vs. compliance, and autonomy vs. control. When triggers render tensions salient, organizational members rely on three responses (avoiding, shrinking, and stretching) to deal with tensions while performing routines. Based on these findings, we contribute to the routines and paradox literatures by discussing how routines are used as rubber bands in balancing tensions.</p>
Response to Reviewers:	<p>Authors' response to reviewers' comments</p> <p>Dear reviewers,</p> <p>Thank you for taking the time to read our revised manuscript.</p> <p>Given that Reviewer 1 did not have any additional comments/questions, in what follows we address Reviewer's 2 concerns. Each of the comments is presented and followed by our response.</p> <p>Once again, thank you both for your work and for providing such invaluable feedback. We really appreciate how you have pushed us to improve our manuscript. We hope that this revised version of the paper does a good job in addressing your concerns.</p> <p>The authors</p> <p>Reviewer #1: The authors have done a very good job of responding to my initial comments and feedback. Thus, I have no further suggestions for the manuscript.</p> <p>Authors' response: Thank you again for appreciating our efforts and for seeing the value in our work.</p> <p>Reviewer #2: The rubber band effect: Managing the stability and change paradox in routines.</p> <p>Let me first congratulate the author(s) for submitting this revised version of the manuscript. As you know I have been very skeptical with regards to the theoretical approach taken. The way the research question and the problem that the author(s) want to study does a far better job now and I did not expect that it was possible to turn the paper round conceptually. But the way the research question is now framed clearly</p>

works and provides a potentially interesting perspective on routine dynamics studies: what do routine participants do if contradiction, persistent tensions become salient and a simple continuation of performances (with some nuances) is no longer an option? Having said that, the paper still suffers from some more or less significant shortcomings, particularly when it comes to the understanding of routine dynamics studies. Let me outline the most salient ones in more detail below:

Authors' response: Thank you for the positive note. We appreciate you see the progress in our work and are grateful for your constructive feedback. We have now revised the previous version of the manuscript, taking into consideration your latest comments and suggestions. We hope you find this revised version clearer and our contributions stronger.

Below we explain how we have dealt with each of your concerns and the improvements we have made following your comments and suggestions. You will find our response to your comments following the issues you have raised.

1. The conceptualization of routines is still a bit cumbersome:

Although the author(s) claim to follow a practice perspective on organizational routines, they still do not fully subscribe to this perspective. This is not only an issue of wording, but it renders some of the insights problematic. A key issue is that the author(s), maybe unintentionally, equate the ostensive aspect (the pattern that emerges) with the formal expectation that exists within an organization towards the potential outcome of a routine (e.g. compliance). However, such a perspective is not in line with what routine dynamics scholars understand as the ostensive. Formal directives, SoPs, formal rules etc are not to be equated with the ostensive aspect. Those formal aspects are artifacts, that only indirectly influence routine performance (see Feldman et al. 2016 for a good explanation). Hence, the ostensive is the observable pattern that emerges from multiple performances. Routines are therefore not "things", but they can best be understood as processes themselves.

The author(s) sometimes state sentences like "the routine", which refers to routines as things and should hence be avoided if a practice perspective is taken seriously (there are more examples throughout the text, like on p. 20 "expectations stated in routines", or p. 24 "standard policies and routines"). On page 8 the authors refer to the "ostensive and performative purpose of routines". It remains unclear to me what that could be, there is no purpose etc. My feeling is, and that is quite consequential for this paper, that the author(s) mistakenly equate the ostensive aspect with the formal expectation and then aim at studying how routine participants deal with the case that the formal expectation creates problems for the actual, in-situ performance of the routine (e.g. because of an unexpected event). This, however, has been extensively studied already in routine dynamics studies (see my first review and also Geiger/Danner-Schröder 2021: Unexpected events and routine dynamics).

Secondly, and this is more problematic for the present paper, this creates confusion as to what kind of tensions the author(s) are referring to. The coping strategies identified in this paper resemble very much with the very early findings of Feldman (2000) where speaks of repairing, expanding and striving. All these were performances undertaken by routine participants to adapt the performance of routines to specific situational cues; quite like in the present paper. So whilst I believe that studying how routine participants deal with tensions that have become salient is an interesting and worthwhile endeavor, it requires more theoretical and empirical sophistication as it is currently the case in this paper. The present paper focuses more on how routine participants deal with the discrepancies of formal expectations and the necessities of the actual situation, which is not the same!

Authors' response: Thank you for raising these objections, as addressing them helped us to refine our arguments. In the literature review (p. 6) we clarify that the use of the noun "routine" must be understood as a form of black-boxing of the actor-network that constitutes the routine. As a consequence, the ostensive dimension of routines is not just an abstract representation or a set of formal expectations; rather, it conveys the capacity of black-boxed routine to become an actant, producing identity and sensemaking. Consequently, in the discussion (p. 31) we have conceptualized elasticity of routines as the development of flexible patterns (e.g. expectations,

typification, identity). In this, we clarify that actors can certainly adapt routines but that in doing so they may trigger tensions, especially if they attempt to reconfigure the associations in the actor network that constitutes the routine in ways that generate resistance and opposition.

We apologize for the lack of clarity in our conceptualization of the ostensive aspect and understand this may have led to confusion, even though we had already defined the ostensive aspect as “the recognizable patterns of action” (p. 5) in the previous version. Building on your comment, we have now clearly defined the ostensive as the routine pattern and separated it from organizational expectations that may require the adherence to artifacts such as formal procedures/protocols. We have also reworked the text throughout to make sure to eliminate any source of confusion. Thanks for pointing out the details on pages 8, 20 and 24, which were unintentional errors from our side. Again, it was not our intention to equate the ostensive aspect to a formal expectation and we thank you for bringing this point to our attention. We have now clarified this throughout the text.

We have also improved the text to show that experienced tensions require organizational members to draw on alternative routine performances which may not be aligned with the routine pattern (ostensive), but which are necessary in order to fulfill the routine and accomplish its outcome. This is different to say that a formal expectation creates problems for routine performance: we argue that it is the experience of paradoxical tensions that prompt organizational members to draw on the sets of responses (stretch, shrink, avoid) and use the routine as a rubber band. Further, the triggers we have identified are not “unexpected events”; rather they are individual and contextual conditions that render tensions salient in a specific situation. As highlighted in our findings section (also summarized in the Data Structure, Fig 1) the scarcity of resources, goal multiplicity and misalignment of roles and experiences as organization members perform the routines trigger tensions, for example between autonomy and control; or flexibility and compliance, etc.

Finally, we can understand that you see similarities between our work and Feldman (2000). Yet, once again, we are interested in understanding how paradoxical tensions are managed (once rendered salient as a result of the triggers), which is quite different from Feldman’s study. Feldman’s study shows, quoting her, “routines that change as participants respond to outcomes of previous iterations of a routine.” In our case, our primary focus is neither on routine change nor on responses adopted as a consequence of previous routine performances. Rather, we make a case for how, when the continuity of a routine is threatened – independently of previous iterations of the routine – organizational members deal with the experienced paradoxical tension either by accommodating it (by shrinking or stretching routines) or avoiding it. Therefore, the management of paradoxical tensions happens within a routine performance and not as a consequence of previous performances. We hope this clarifies your concern and that you see our contribution at the intersection of routine and paradox studies.

2. Tease out the breakups and redirections in the findings

In general, as I have expressed in my first review, I still believe that the author(s) have a good dataset and that there is something interesting in it. I can follow the findings in first identifying the trigger that renders paradoxical tensions salient. However, I still struggle with the identified tensions. And this is not so much with the categories which are interesting, but rather with the way they are explained and portrayed. And that links up with my previous comment: Currently, the respondents tell how they struggle with meeting the formal expectation how they should perform a routine (or better: a standard) and what they actually do. This is, however, not I would expect, since this is not of interest for routine dynamic studies. I would expect that rendering a paradoxical tension salient would bring the performance of a routine to a standstill (not knowing what to do), or it would significantly redirect the path of the performance trajectory (see Pentland et al. 2021 in *OrgTheory* on path). Seen this way I would expect the findings to show how the course of routine performance gets significantly altered as a result of the salient tension. It becomes impossible to move on, so performances have to either stop or take a drastic turn. Showing this would require, from my point of view, to bring the observational data back in. How did the routine pattern change from previous performances, which actions are novel, which sequences are altered and so on. This

can best be done by analyzing actions, as most routine dynamics studies do (see Geiger et al. 2021 ASQ for an example). This has the potential to reveal really interesting insights.

Authors' response: Thanks for appreciating our dataset.

It is not entirely clear to us if the issue is with the tensions (as you state) or with the responses used to deal with the tensions (which is what you noted in your explanation). We agree with you that a salient tension would either put the routine on hold or require a significant redirection of the routine performance. Although the process is linear, once the tensions are salient, organization members try to make sense of the tensions. Unless there are no resources available for them or they lack agency, they will engage in one way or another to deal with the tension and perform the routine.

This is what we argue, for example, when we say that “disruptive conditions are likely to exacerbate the tensions between needs for standardization and adaptation” (p. 8); “Major events can also force a complete readaptation of routines” (p. 14); “the combination of circumstances in a particular moment brings forth paradoxical tensions that organizational members deal with as they perform routines because not dealing with the paradoxical tensions means not completing a routine” (p. 30). Furthermore, this is what we show in our findings. For example, the case when the senior emergency physician could not figure out the patient diagnosis (p. 26) clearly shows a disruption of the routine performance and the redirection taken (i.e. calling a specialist, ordering extra tests, referring the patient to a specialist) in order to overcome the disruption and continue with the routine trajectory. Yet, there is a misunderstanding when you say this is about the tensions because it is about the responses and we show exactly what you say is missing in our section on “Coping with tensions”.

To make this even more evident and following your suggestion, we went back to our data and have now added more evidence from our observations showing how this happens. We have added a section on the “diagnosis routine” in the findings (see pp. 15-17), together with figure 2 showing the overall routine pattern, as identified from the observational data. We hope this makes it easier to follow the tensions experienced during a routine performance and also how the use of responses to deal with the tensions alters the enacted pattern. We have also created data tables providing additional evidence (see appendix), inspired by your recommendation of Geiger et al. (2021). Finally, we have streamlined our findings so as to use the diagnosis routine throughout. We hope that these additions address your concerns.

3. Contribution of the paper

Whilst the theoretical framing of the paper has improved considerably, the contribution section still remains underdeveloped. Further, it is not clear to which body of literature the author(s) aim at contribution: to the paradox literature, to routine dynamics literature or to both and how? Currently I really struggle to see what is novel except from what we already know: routine performances change in the course of responding to tensions and novelty. I would expect to learn more how paradoxical tensions lead to a discontinuity in routine performances and how this leads to the emergence to entirely novel performance paths that go beyond repairing and striving which generally account for only minor changes in the observable pattern. The paper could explore how such patterns are broken as a result of salient paradoxical tensions and how a redirection of performances then might look like. This would be really interesting but would still require a significant reframing of the findings and discussion sections.

Overall I believe the paper has moved in the right direction and the author(s) have managed to convince me that routine dynamics and paradoxical tensions can be fruitfully studied. To really turn the paper round would, however, require a more sound conceptualization (both theoretically and empirically) of routine dynamics. Otherwise there is a risk of reformulation already existing insights through a paradox lens. I hope my comments are useful for this endeavor.

Authors' response: Thanks for this comment and for pushing us to clarify our contributions. The findings-related point has been addressed in the response above.

Regarding our contributions, as we have tried to express in the previous version, we aim at contributing to both literatures. It is what we have found at the intersection of paradox and routine studies what excited us to even start the project and that is where we see our contributions.

We contribute to the paradox literature by identifying conditions that influence the choice of both/and responses; we namely expand previous work on power and paradox by considering the role of seniority and experience. This is relevant because current literature on responding to paradoxes does not consider the experience and seniority of organizational members. Also, we better articulate the idea of routines as actor networks (which was previously introduced in the literature but which implications were not fully considered).

Further, we contribute to the routines literature by showing how routines dualities may become salient in the form of paradoxical tensions (as experienced by routine participants) and how organizational members cope with these tensions in routine performances by using routines as rubber bands.

We hope that our new version responds to the concerns you had. We would like to thank you again for the constructive feedback and for appreciating the work we have put into improving the manuscript.

Dear Dr. Factor, Professor Verduijn and Professor Müller,

Thank you for yet another opportunity to revise and resubmit our manuscript. We have now thoroughly revised the previous submission and incorporated the helpful suggestions we have received from Reviewer 2 (given that Reviewer 1 did not have any additional comments to address).

We are grateful that the two reviewers saw the potential of our work and for the specific suggestions which pushed us to further refine our arguments and clarify our contributions. Following Reviewer 2's feedback, we have done the following:

1. In addressing comment #1, we have leveraged on an ANT perspective on routines to clarify our conceptualization by proposing that the 'ostensive' element of routines is not just their formal, abstract description but a form of black-boxing, through which routines become actants. This has helped us to strengthen our theoretical framing, avoiding both the extreme of reifying routines and of considering them as purely emergent.
2. In addressing comment #2, we have streamlined the findings, revised the data structure, added a description of the diagnosis routine and created data tables to provide additional evidence to support our arguments. We are attaching the data tables as an appendix to the response to reviewers.
3. Finally, in addressing comment #3, we further elaborated point 1 above in the discussion, showing how elasticity is allowed by the fact that the routine incorporates, rather than rigid prescriptions for action, particular patterns/rhythm. Yet, the flexibility in performing (stretching/shrinking) is limited by the fact that the actor-network that underpins the routine will resist (some) attempts at translation/association. Paradoxical tensions emerge when achieving desired outcomes requires forms of routine adaptations that are resisted by the actor network. This has allowed us to strengthen our contribution to the routines literature.

In the attached response letter to the reviewers, we have explained in more detail how we have dealt with the issues raised by Reviewer 2 (again, given that Reviewer 1 had no further comments). We hope that the changes introduced meet your and the reviewer's concerns and we look forward to your decision.

Best regards,

Virginia Rosales | Medhanie Gaim | Marco Berti | Miguel Pina e Cunha

Authors' response to reviewers' comments

Dear reviewers,

Thank you for taking the time to read our revised manuscript.

Given that Reviewer 1 did not have any additional comments/questions, in what follows we address Reviewer's 2 concerns. Each of the comments is presented and followed by our response.

Once again, thank you both for your work and for providing such invaluable feedback. We really appreciate how you have pushed us to improve our manuscript. We hope that this revised version of the paper does a good job in addressing your concerns.

The authors

Reviewer #1: The authors have done a very good job of responding to my initial comments and feedback. Thus, I have no further suggestions for the manuscript.

Authors' response: Thank you again for appreciating our efforts and for seeing the value in our work.

Reviewer #2: The rubber band effect: Managing the stability and change paradox in routines.

Let me first congratulate the author(s) for submitting this revised version of the manuscript. As you know I have been very skeptical with regards to the theoretical approach taken. The way the research question and the problem that the author(s) want to study does a far better job now and I did not expect that it was possible to turn the paper round conceptually. But the way the research question is now framed clearly works and provides a potentially interesting perspective on routine dynamics studies: what do routine participants do if contradiction, persistent tensions become salient and a simple continuation of performances (with some nuances) is no longer an option? Having said that, the paper still suffers from some more or less significant shortcomings, particularly when it comes to the understanding of routine dynamics studies. Let me outline the most salient ones in more detail below:

Authors' response: Thank you for the positive note. We appreciate you see the progress in our work and are grateful for your constructive feedback. We have now revised the previous version of the manuscript, taking into consideration your latest comments and suggestions. We hope you find this revised version clearer and our contributions stronger.

Below we explain how we have dealt with each of your concerns and the improvements we have made following your comments and suggestions. You will find our response to your comments (in bold), following the issues you have raised.

1. The conceptualization of routines is still a bit cumbersome: Although the author(s) claim to follow a practice perspective on organizational routines, they still do not fully subscribe to this perspective. This is not only an issue of wording, but it renders some of the insights problematic. A key issue is that the author(s), maybe

unintentionally, equate the ostensive aspect (the pattern that emerges) with the formal expectation that exists within an organization towards the potential outcome of a routine (e.g. compliance). However, such a perspective is not in line with what routine dynamics scholars understand as the ostensive. Formal directives, SoPs, formal rules etc are not to be equated with the ostensive aspect. Those formal aspects are artifacts, that only indirectly influence routine performance (see Feldman et al. 2016 for a good explanation). Hence, the ostensive is the observable pattern that emerges from multiple performances. Routines are therefore not "things", but they can best be understood as processes themselves.

The author(s) sometimes state sentences like "the routine", which refers to routines as things and should hence be avoided if a practice perspective is taken seriously (there are more examples throughout the text, like on p. 20 "expectations stated in routines", or p. 24 "standard policies and routines"). On page 8 the authors refer to the "ostensive and performative purpose of routines". It remains unclear to me what that could be, there is no purpose etc. My feeling is, and that is quite consequential for this paper, that the author(s) mistakenly equate the ostensive aspect with the formal expectation and then aim at studying how routine participants deal with the case that the formal expectation creates problems for the actual, in-situ performance of the routine (e.g. because of an unexpected event). This, however, has been extensively studied already in routine dynamics studies (see my first review and also Geiger/Danner-Schröder 2021: Unexpected events and routine dynamics).

Secondly, and this is more problematic for the present paper, this creates confusion as to what kind of tensions the author(s) are referring to. The coping strategies identified in this paper resemble very much with the very early findings of Feldman (2000) where speaks of repairing, expanding and striving. All these were performances undertaken by routine participants to adapt the performance of routines to specific situational cues; quite like in the present paper. So whilst I believe that studying how routine participants deal with tensions that have become salient is an interesting and worthwhile endeavor, it requires more theoretical and empirical sophistication as it is currently the case in this paper. The present paper focuses more on how routine participants deal with the discrepancies of formal expectations and the necessities of the actual situation, which is not the same!

Authors' response: Thank you for raising these objections, as addressing them helped us to refine our arguments. In the literature review (p. 6) we clarify that the use of the noun "routine" must be understood as a form of black-boxing of the actor-network that constitutes the routine. As a consequence, the ostensive dimension of routines is not just an abstract representation or a set of formal expectations; rather, it conveys the capacity of black-boxed routine to become an actant, producing identity and sensemaking. Consequently, in the discussion (p. 31) we have conceptualized elasticity of routines as the development of flexible patterns (e.g. expectations, typification, identity). In this, we clarify that actors can certainly adapt routines but that in doing so they may trigger tensions, especially if they attempt to reconfigure the associations in the actor network that constitutes the routine in ways that generate resistance and opposition.

We apologize for the lack of clarity in our conceptualization of the ostensive aspect and understand this may have led to confusion, even though we had already defined the ostensive aspect as "the recognizable patterns of action" (p. 5) in the previous version. Building on your comment, we have now clearly defined the ostensive as the routine pattern and separated it from

organizational expectations that may require the adherence to artifacts such as formal procedures/protocols. We have also reworked the text throughout to make sure to eliminate any source of confusion. Thanks for pointing out the details on pages 8, 20 and 24, which were unintentional errors from our side. Again, it was not our intention to equate the ostensive aspect to a formal expectation and we thank you for bringing this point to our attention. We have now clarified this throughout the text.

We have also improved the text to show that experienced tensions require organizational members to draw on alternative routine performances which may not be aligned with the routine pattern (ostensive), but which are necessary in order to fulfill the routine and accomplish its outcome. This is different to say that a formal expectation creates problems for routine performance: we argue that it is the experience of paradoxical tensions that prompt organizational members to draw on the sets of responses (stretch, shrink, avoid) and use the routine as a rubber band. Further, the triggers we have identified are not “unexpected events”; rather they are individual and contextual conditions that render tensions salient in a specific situation. As highlighted in our findings section (also summarized in the Data Structure, Fig 1) the scarcity of resources, goal multiplicity and misalignment of roles and experiences as organization members perform the routines trigger tensions, for example between autonomy and control; or flexibility and compliance, etc.

Finally, we can understand that you see similarities between our work and Feldman (2000). Yet, once again, we are interested in understanding how paradoxical tensions are managed (once rendered salient as a result of the triggers), which is quite different from Feldman’s study. Feldman’s study shows, quoting her, “routines that change as participants respond to outcomes of previous iterations of a routine.” In our case, our primary focus is neither on routine change nor on responses adopted as a consequence of previous routine performances. Rather, we make a case for how, when the continuity of a routine is threatened – independently of previous iterations of the routine – organizational members deal with the experienced paradoxical tension either by accommodating it (by shrinking or stretching routines) or avoiding it. Therefore, the management of paradoxical tensions happens within a routine performance and not as a consequence of previous performances. We hope this clarifies your concern and that you see our contribution at the intersection of routine and paradox studies.

2. Tease out the breakups and redirections in the findings

In general, as I have expressed in my first review, I still believe that the author(s) have a good dataset and that there is something interesting in it. I can follow the findings in first identifying the trigger that renders paradoxical tensions salient. However, I still struggle with the identified tensions. And this is not so much with the categories which are interesting, but rather with the way they are explained and portrayed. And that links up with my previous comment: Currently, the respondents tell how they struggle with meeting the formal expectation how they should perform a routine (or better: a standard) and what they actually do. This is, however, not I would expect, since this is not of interest for routine dynamic studies. I would expect that rendering a paradoxical tension salient would bring the performance of a routine to a standstill (not knowing what to do), or it would significantly redirect the path of the performance trajectory (see Pentland et al. 2021 in OrgTheory on path). Seen this way I would expect the findings to show how the course of routine performance gets significantly altered as a result of the salient tension. It becomes impossible to move on, so performances have to either stop or take a drastic turn. Showing this would require, from my point of view, to bring the observational data back in. How did the routine pattern change from previous performances, which actions

are novel, which sequences are altered and so on. This can best be done by analyzing actions, as most routine dynamics studies do (see Geiger et al. 2021 ASQ for an example). This has the potential to reveal really interesting insights.

Authors' response: Thanks for appreciating our dataset.

It is not entirely clear to us if the issue is with the tensions (as you state) or with the responses used to deal with the tensions (which is what you noted in your explanation). We agree with you that a salient tension would either put the routine on hold or require a significant redirection of the routine performance. Although the process is linear, once the tensions are salient, organization members try to make sense of the tensions. Unless there are no resources available for them or they lack agency, they will engage in one way or another to deal with the tension and perform the routine.

This is what we argue, for example, when we say that “disruptive conditions are likely to exacerbate the tensions between needs for standardization and adaptation” (p. 8); “Major events can also force a complete readaptation of routines” (p. 14); “the combination of circumstances in a particular moment brings forth paradoxical tensions that organizational members deal with as they perform routines because not dealing with the paradoxical tensions means not completing a routine” (p. 30). Furthermore, this is what we show in our findings. For example, the case when the senior emergency physician could not figure out the patient diagnosis (p. 26) clearly shows a disruption of the routine performance and the redirection taken (i.e. calling a specialist, ordering extra tests, referring the patient to a specialist) in order to overcome the disruption and continue with the routine trajectory. Yet, there is a misunderstanding when you say this is about the tensions because it is about the responses and we show exactly what you say is missing in our section on “Coping with tensions”.

To make this even more evident and following your suggestion, we went back to our data and have now added more evidence from our observations showing how this happens. We have added a section on the “diagnosis routine” in the findings (see pp. 15-17), together with figure 2 showing the overall routine pattern, as identified from the observational data. We hope this makes it easier to follow the tensions experienced during a routine performance and also how the use of responses to deal with the tensions alters the enacted pattern. We have also created data tables providing additional evidence (see appendix), inspired by your recommendation of Geiger et al. (2021). Finally, we have streamlined our findings so as to use the diagnosis routine throughout. We hope that these additions address your concerns.

3. Contribution of the paper

Whilst the theoretical framing of the paper has improved considerably, the contribution section still remains underdeveloped. Further, it is not clear to which body of literature the author(s) aim at contribution: to the paradox literature, to routine dynamics literature or to both and how? Currently I really struggle to see what is novel except from what we already know: routine performances change in the course of responding to tensions and novelty. I would expect to learn more how paradoxical tensions lead to a discontinuity in routine performances and how this leads to the emergence to entirely novel performance paths that go beyond repairing and striving which generally account for only minor changes in the observable pattern. The paper could explore how such patterns are broken as a result of salient paradoxical tensions and how a redirection of performances then might look like. This would be really interesting but would still require a significant reframing of the findings and discussion sections.

Overall I believe the paper has moved in the right direction and the author(s) have managed to convince me that routine dynamics and paradoxical tensions can be fruitfully studied. To really turn the paper round would, however, require a more sound conceptualization (both theoretically and empirically) of routine dynamics. Otherwise there is a risk of reformulation already existing insights through a paradox lens. I hope my comments are useful for this endeavor.

Authors' response: Thanks for this comment and for pushing us to clarify our contributions. The findings-related point has been addressed in the response above.

Regarding our contributions, as we have tried to express in the previous version, we aim at contributing to both literatures. It is what we have found at the intersection of paradox and routine studies what excited us to even start the project and that is where we see our contributions.

We contribute to the paradox literature by identifying conditions that influence the choice of both/and responses; we namely expand previous work on power and paradox by considering the role of seniority and experience. This is relevant because current literature on responding to paradoxes does not consider the experience and seniority of organizational members. Also, we better articulate the idea of routines as actor networks (which was previously introduced in the literature but which implications were not fully considered).

Further, we contribute to the routines literature by showing how routines dualities may become salient in the form of paradoxical tensions (as experienced by routine participants) and how organizational members cope with these tensions in routine performances by using routines as rubber bands.

We hope that our new version responds to the concerns you had. We would like to thank you again for the constructive feedback and for appreciating the work we have put into improving the manuscript.

Highlights

- Organizational routines embody the stability-change duality.
- Using a paradox lens, we identify the conditions under which the duality becomes salient in the form of paradoxical tensions.
- Organizational members respond to paradoxical tensions using routines elastically.
- The rubber band effect aids routine maintenance while enabling internal variation.

Title

The rubber band effect: Managing the stability-change paradox in routines

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The rubber band effect: Managing the stability-change paradox in routines

ABSTRACT

Organizational routines embody the stability-change duality: for routines to be consistent, actors performing them must improvise to adjust to changing conditions. While these interdependent aspects are often intuitively navigated by organizational actors, sometimes they can manifest as contradictory, paradoxical requirements. Using a paradox lens, this paper explores how individuals deal with tensions as they oscillate between preserving and altering routines. Building on an ethnography of an emergency room, we unpack routine dynamics and identify three tensions with paradoxical attributes: learning vs. efficiency, flexibility vs. compliance, and autonomy vs. control. When triggers render tensions salient, organizational members rely on three responses (avoiding, shrinking, and stretching) to deal with tensions while performing routines. Based on these findings, we contribute to the routines and paradox literatures by discussing how routines are used as rubber bands in balancing tensions.

Keywords: routines, paradox, organizational paradoxes, stability, change, tensions, emergency room, extreme context

INTRODUCTION

Routines denote the “repetitive, recognizable patterns of interdependent action, carried out by multiple actors” (Feldman & Pentland, 2003:95). As much as they are stable, routines also change (Feldman & Pentland, 2003; Pentland, Hærem, & Hillison, 2011). Two distinct approaches to study routines have emerged in the organizational literature (Parmigiani & Howard-Grenville, 2011): the *capabilities perspective* views routines as repositories of organizational knowledge, while the *practice perspective* examines how routines are enacted in a specific context, as individuals adjust their behavior to adapt to local conditions. These perspectives reveal the dual nature of routines: in order to consistently reproduce repetitive patterns of action, individuals must introduce variation, producing “nonidentical sameness” (Birnholtz, Cohen, & Hoch, 2007:317). Similarly, in order to be useful, past knowledge incorporated in routines must be interpreted and adapted. The relationship between stability and change that underpins routines has inspired Farjoun’s (2010) idea that these two elements should be understood as a duality of interdependent and mutually enabling elements rather than an oppositional dualism. Thus, routines have not been treated as paradoxical.

While this theorization is conceptually sound and appears confirmed by empirical studies that show that the performance of routines generates multiple and highly variable patterns of action (Pentland et al., 2011), this paper offers a contrasting view based on our empirical observations. We maintain that, while the various dualities that characterize routines (*ostensive and performative*, *standardization and improvisation*, *stability and change*) are conceptually “intertwined” (Parmigiani & Howard-Grenville, 2011:435), organizational conditions can make the integration of these dualities problematic. If in the seminal study by Feldman (2000) actors are shown to seamlessly combine continuity and flexibility in their performance of routines, different outcomes are possible. A bureaucratically minded manager, or external inspector, preoccupied with ensuring

compliance to formal regulations, may impose strict constraints on the performance of routines. In such case, staff members would become subject to clearly contradictory demands: to do their job (complying with formal requirements) they would need *not* to do their job (of delivering effective services to students), exposing them to a pragmatic paradox (Berti & Simpson, 2021). Similarly, a radical, sudden change in the context (the Covid-19 pandemic, for example) could produce disruptive effects impairing the incremental organizational learning process that is required for the maintenance of routines (Feldman, 2000; Feldman & Pentland, 2003), exposing actors to the need to find novel ways to navigate contradictory requirements. Thus, it is necessary to understand under which conditions routines' dualities become salient in the form of paradoxical tensions, and how organizations and organizational members navigate these tensions. Hence, the question that motivates this paper: *how do organizational members deal with paradoxical tensions that emerge as they perform routines?*

We address this question through an ethnographic investigation of practitioners in a University emergency room (ER) where routines must be enacted in an unpredictable context. At the same time, there is a strong requirement to follow standard procedures and evidence-based practice (Batista et al., 2016). In this context, stability and change in the enactment of routines are not default conditions but constitute ongoing accomplishments that require navigation of what should be and what actually is. We employ a paradox lens (Lewis, 2000; Smith & Lewis, 2011) to explore how individuals deal with contradictions and the ensuing tensions as they oscillate between preserving and altering routines. A paradox lens assumes that contradictory demands can coexist (Putnam, Fairhurst, & Banghart, 2016), and that they must be worked through.

This paper follows calls for studies on the management of contradictions inherent in routines (Cohen, 2007; Turner & Rindova, 2012; Dittrich, Guérard, & Seidl, 2016), contributing to the routines and mainly to the paradox literatures by identifying triggers, tensions, and responses

in an extreme environment (Hällgren, Rouleau & de Rond, 2018) in which decisions have serious consequences. In particular, we aim to explore how organizational members, as they perform routines, become exposed to paradoxical tensions, and how they can navigate them.

While several studies have addressed the stability-change paradox, doing so in a revelatory context helps us theorize how routines are reproduced as individuals deal with contradictions of complex organizing (D'Adderio, 2014). Doing so helps expand our understanding of how paradoxes can be managed through everyday practices (Lê & Bednarek, 2017), articulating how routines are used as 'rubber bands'. The elastic metaphor is not new to paradox studies: it has been used before to describe how tensions lead to 'pushing and pulling' behaviors (Putnam, Myers & Gailliard, 2014), and to explain how hybrid forms of organizing are sustained through a recursive interplay between organizations making space and staff taking space for competing logics (Gümüşay et al., 2020). By exploring routines in the ER, we extend the use of the elasticity metaphor considering the responses (avoiding, shrinking, and stretching) put in place by individual actors to deal with the contradictory need for consistency and adaptability. Doing so helps understand the conditions that enable organizational members to: 1) 'unthinkingly' manage routines' dualities (thus keeping their paradoxical dimension latent); 2) deliberately acknowledge and navigate paradoxes made salient by 'disruptive' conditions, leveraging the learning opportunities of paradox; or 3) remain 'stuck' in pragmatic paradoxes, being deprived of the agency to navigate the contradictory requirements imposed by the routine. We thus contribute to the paradox and routines literatures by showing how routines' dualities can be appropriated differently by different individuals when faced with dual requirements.

THE (N)EVER-CHANGING WORLD OF ROUTINES

Organizational routines are a central force for stability in organizations. They allow individuals to coordinate tasks through connections (Feldman & Rafaeli, 2002), helping them anticipate each other's behaviors, aligning their individual lines of action (Dionysiou & Tsoukas, 2013) and developing shared understandings (Okhuysen & Bechky, 2009). As such, they contribute to inertia (Näslund & Perner, 2012; Ocasio, 1999), an organizational condition necessary to guarantee the reproducibility of structures (Hannan & Freeman, 1984). In this regard, routines can be considered as a source of organizational capabilities (Parmigiani & Howard-Grenville, 2011) and a repository of organizational knowledge (Dosi, Faillo, & Marengo, 2008).

A different, practice-oriented, perspective focuses instead on the internal dynamics of routines (Feldman & Pentland, 2008; Pentland & Feldman, 2005). Examined as effortful accomplishments (Pentland & Rueter, 1994), routines include both ostensive aspects, which refer to the recognizable patterns of action and relations associated with a routine, and performative aspects, which are the situated performances of the routine (Feldman & Pentland, 2003). Wittgenstein was the first to note that language can be both used to define by analogical illustration (by pointing at an object and naming it), and to cause concrete changes (e.g., 'you are fired') in social space (Hintikka, 1958). Similarly, routines can be defined (ostensively) as abstract patterns that account for agents' conduct: in this regard they are characterized by almost ritualistic repetition of actions, reproducing recognizable abstract patterns. At the same time, organizational routines are enacted with the purpose of successfully carrying out tasks. Since the conditions under which the tasks must be performed vary (Feldman, 2000), and because the enactment of routines requires the interaction of a complex and variable network of actors and actants (Pentland et al., 2011), performing routines consistently requires adaptability and a degree of improvisation (Cunha, Miner, & Antonacopoulou, 2016).

Thus, the use of the noun ‘routine’ should be understood as a form of ‘black-boxing’, the process through which an action net incorporating heterogeneous agencies is represented and given a unitary identity (Latour, 2005). When considered from an actor-network theory perspective (Feldman et al., 2016), routines incorporate both human actors and non-human actants (procedures, check-lists, tools, etc.). The former will try to adjust routines to their purposes (e.g., guaranteeing consistency of outcomes, reducing individual accountability or maintaining control of the process), while the latter will resist attempts to be translated (Callon, 1986), as in the case of an assembly line which will impose a certain rhythm on workers’ activities. In the case of a hybrid organization (such as a University hospital) which simultaneously pursues multiple objectives and needs to attend to multiple logics (Besharov & Smith, 2014), the same actor may be required to put different emphasis on adaptation or consistency depending on which logic is situationally more salient.

Viewed in this perspective, the ostensive dimension of routines is not exclusively their abstract representation. When an actor network is black-boxed, it becomes an actant (Latour, 1999), a non-human, non-individual entity which “is granted to be the source of an action” (Latour, 1996:773). Indeed, routines ‘act’ by enabling sensemaking (Patriotta & Gruber, 2015), supporting identity work (Brown & Lewis, 2011) and providing a rhythm to human actors’ actions (Geiger et al., 2021). In sum, acknowledging the dynamic nature of routines should not lead to ‘dissolve’ them, treating them as a purely emergent phenomenon that actors can adapt at will. Thus, a persistent tension exists between ostensive and performative aspects of routines.

The intrinsic contradiction between adaptability and consistency also manifests within the “capabilities” perspective on routines (Parmigiani & Howard-Grenville 2011:414). In such perspective, routines are seen as regular and predictable behavior patterns of firms, acting as collective memory, repertoires of standard solutions to recurrent organizational problems (Nelson & Winter, 1982). Yet, the task of recognizing situations as standard problems and associating them

to standard solutions is not trivial, especially when changing environmental conditions and the natural variability of circumstances and uncertainty of information inputs make such association not obvious. In most cases, organizational actors must deal with “hard-to-predict nonroutine behaviors and events, which, insofar as they occur, are stochastic elements” (Tsoukas, 2017:140).

Tensions, contradictions and multiple routine patterns

Highlighting structural and agentic components provides a more nuanced view of routines as it portrays them as a source of endogenous change (Feldman & Pentland, 2003; Pentland et al., 2011; Yi, Knudsen & Becker, 2016). This has led some authors to theorize routines as inherently contradictory: being repetitive, routines are recognizable but every repetition of a routine has the potential to generate change (Cohen, 2007; Birnholtz et al., 2007). In this, they embody a duality between stability and change (Farjoun, 2010): “change is part of stability and stability is part of change” (Feldman, 2016:34). Most of the routines literature maintains that the dualisms intrinsic to routines do not represent contradictions but simply interdependent elements that are necessary to mutual constitution (Parmigiani & Howard-Grenville, 2011; Pentland et al., 2011). This conceptualization originates from the seminal contribution by Feldman (2000) who described how organizational actors could manage the concomitant need for continuity and adaptation through an apparently seamless exchange of tacit and explicit, individual and socialized knowledge (Feldman, 2000). Farjoun (2010) has built on this idea, extending it to declare that it is possible “to dissolve and transcend the paradoxical relationship between stability and change” (Farjoun, 2010:218).

However, recent studies exploring how individuals deal with paradoxes in routines acknowledge the persistence of tensions within them (e.g., D’Adderio, 2014; Sonenshein, 2016; Turner & Rindova, 2012). Turner and Rindova (2012) recognize the coexistence of *consistency* vs. *flexibility*, showing how employees develop dual ostensive patterns, each targeting one side of the

contradiction and therefore enabling them to manage the resulting tension. Looking at the *replication vs. innovation* contradiction, D'Adderio (2014) shows individuals use two ostensive aspects, one of alignment and one of improvement, in transferring routines across organizations. These two are enacted alternatively, separating the elements of the tension in time (Poole & Van de Ven, 1989). Sonenshein (2016) identifies patterns of *novelty vs. familiarity* in explaining the processes individuals employed in achieving recognizable creativity through routine performance.

These studies suggest that tensions in ostensive and performative aspects of routines can be detrimental to the accomplishment of work (Turner & Rindova, 2018) and have to be dealt with to ensure routine functioning. It is possible that actors' efforts to repair, expand and strive routines (Feldman, 2000) do not always produce harmonious results, transcending the opposition. Organizational actors' behavior is subject to different types of constraints that can impair this ongoing learning process.

On the one hand, formal directives aimed at regulating and coordinating actions can cause unintended effects, as they become ritualistically enforced (Merton, 1940) or exploited as sources of power (Crozier, 1964). This can limit the capacity of actors to flexibly adapt to different conditions, exposing them to "pragmatic paradoxes" (Watzlawick et al., 1967:194), situations in which actors must deal with non-negotiable contradictory demands, which manifest in organizations when individuals must comply with contrasting requirements, such as achieving the routine outcome without deviating from a rigid performance of the routine (Berti & Simpson, 2021).

On the other hand, contextual conditions such as lack of resources or multiplicity of contrasting logics (Smith & Lewis, 2011) can make accommodating different requirements more challenging. It may be possible to balance the need to achieve the substantive goals of a routine (e.g., guarantee that ER patients are admitted according to a proper triage process) while flexibly

adapting to particular conditions (e.g., a surge in patients), but this adaptation process can become disrupted if additional constraints emerge (e.g., the lack of Personal Protective Equipment or of adequate isolation protocols that put both staff and patients at risk of infection at the onset of the Covid-19 pandemic). These disruptive conditions are likely to exacerbate the tensions between needs for standardization and adaptation, continuity and change, to the point that many ERs overcome with Covid-19 patients in 2020 ceased to look like proper hospitals: so much for the alignment of ostensive and performative aspects of routines.

Furthermore, routines studies have largely been focused on organizations and tasks which do not pose big coordination challenges (D'Adderio, 2014). Thus, the idea that multiple routine patterns may be at odds, creating tensions because of the inherent contradiction within routines and perpetuating both stability and change, has largely been overlooked in the routines literature. Given this scenario, scholars have called for studies that further an understanding of routines as patterns-in-variety (Cohen, 2007) and how these converge/diverge across different organizational roles (Turner & Rindova, 2012). Further, it has been claimed that routine patterns are more likely to be at odds in organizational contexts where complexity, ambiguity, and heterogeneity are predominant (D'Adderio, 2014). In particular, not all organizational units are exposed to the same degree of uncertainty (Thompson, 1967): typically, front line units (such as a hospital ER) operate in a “fast-response setting” (Patriotta & Gruber, 2015:1575) which require more adaptation to achieve effectiveness, while back-office units (for example, hospital administrators), dealing with more predictable conditions, pursue efficiency maximization by promoting standardization. When different organizational units are involved in the design and execution of the same routine, some actors will put more emphasis on the need to adapt the routine to conditions (stressing adaptation), while others will focus on preserving the routine integrity (stressing consistency).

In sum, integrating the stability-change duality can be problematic, as organizational actors are subject to divergent pressures, representing different interests and priorities. Thus, it is important to empirically explore how organizational members respond to the persistent tensions between these contradictory, yet interdependent, elements.

Paradox as a lens

Organizations are a theatre of paradox: contradictions are inherent to organizing and become salient when there is a need to deal with a variety of stakeholders with different orientations and agendas or when conditions change (Gaim & Wåhlin, 2016; Janssens & Steyaert, 1999). For example, senior management's dual strategic commitments, functional interdependence, or scarcity (Ashforth et al., 2014; Hargrave & Van de Ven, 2017; Smith, 2014) might render latent tensions salient. In case tensions are perceived/salient, actors try to make sense of how to tackle them (Benbenisty & Luria, 2021). It is the salient tension that organizational members experience and that compels them to respond either defensively or proactively (Jarzabkowski, Lê, & Van de Ven, 2013; Gaim et al., 2018; Pradies et al., 2021), depending on the available resources, such as power and discretion. Defensive responses, such as choosing one demand over the other, provide only short-term relief (Jarzabkowski et al., 2013; Lewis & Smith, 2014). By contrast, active responses, which involve adopting a "both/and" thinking, viewing the tension as necessary and seeing the contradictions as complementary (Lewis, 2000; Poole & Van de Ven, 1989; Gaim & Wåhlin, 2016), ensure long term sustainability.

In the organization studies literature, the challenge of dealing with contradictions and ensuing tensions has changed through time (Lewis & Smith, 2014). Contemporary approaches emphasize an explicit acceptance of tensions allowing dynamics of contradictory demands based on "both/and" approaches (Gaim & Wåhlin, 2016). In this regard, researchers take the paradox lens and look at contradictory demands that are interrelated where the resulting tension persists over

time (Schad et al., 2016). In this case, the contradictory demands (e.g., change vs. stability, novelty vs. familiarity, and replication vs. innovation) define one another, are mutually enabling, and a constituent of one another (Farjoun, 2010).

If contradictions are seen from a paradox lens, one demand cannot exist without the other and the tension associated with the contradictions is sustained over time (Smith, 2014). That is, if one demand is ignored, the tension ceases to exist (Sundaramurthy & Lewis, 2003). In other words, when there is a pressure to accommodate both demands (e.g., to preserve and to change existing routines), the response of favoring one over the other is momentary. This is because attending to one of the demands exacerbates the need for the other (Sundaramurthy & Lewis, 2003). Thus, when one demand is favored, the tension resurfaces and even intensifies over time (Smith, 2014; Gaim et al., 2018). We use paradox as a lens to look at stability and change in routines to explore a more all-inclusive and dynamic response to tensions based on “both/and” approaches. In summary, the routines literature shows that contradictions are inherent to routines and how these contradictions are dealt with is critical to understand routine functioning. Nonetheless, our understanding of how people manage these contradictions is still limited. This paper takes a step in that direction. We do so by adopting a paradox lens, which offers an advantage in studying the contradictions and tensions inherent to organizational routines, as it provides a lens through which to understand how to manage contradictions (Smith, 2014).

METHODS

Research setting

To address our research question (*how do organizational members deal with paradoxical tensions that emerge as they perform routines?*), we conducted an organizational ethnography of an emergency room (ER) at a Swedish University hospital.

The ER is a suitable empirical setting to study contradictions and tensions as organizational members alternate between adhering to and flouting routines. ERs host a variety of patients where actors with different orientations take part in solving a challenge. Being a University ER also poses pluralistic constraints imposed by constituencies with different agendas (as a service provider and as a learning platform: the former leaning towards efficiency, the latter towards pedagogy). Further, the ER can exemplify an extreme context (Hällgren et al., 2018), as scarcity of resources, unplanned changes and variety of patients make organizing tensions salient, making it a particularly suitable object of study for advancing paradox research in the context of routine functioning. This is due to the inherent need to balance improvisation and planning, and because patient-related routines require the coordination of actions among individuals with different professional backgrounds (Bucher & Langlely, 2016).

Data collection

To capture the contradictions in routines, we conducted a four-year organizational ethnography of an ER, collecting empirical material through observations, interviews and documents (Hammersley & Atkinson, 2007; Spradley, 1980). Table 1 summarizes the data sources.

TABLE 1 ABOUT HERE

Following organization scholars who have argued for the advantages of the observational method in studying routines in practice (Feldman & Orlikowski, 2011; Feldman et al., 2016), we conducted 25 visits to the ER focusing on the activities performed on a daily basis. Staff members from various professional backgrounds and at different career stages were shadowed for over 135 hours. Field notes were taken during the visits (Spradley, 1980) and transcribed soon after, resulting in 190 pages. Observations also included two two-hour meetings with management and a four-hour

workshop with staff members. All these helped develop a deep understanding of the enacted action patterns and variations in routine performances.

Observations of specific actions in specific times and places (Feldman & Pentland, 2003; Parmigiani & Howard-Grenville, 2011; Feldman et al., 2016) helped us explore staff members' situated behaviors. We complemented our fieldwork with 19 interviews with managers (5) and staff members (14), covering all professions, i.e. medical doctors, assistant nurses, and registered nurses. Interviews lasted between 40 and 120 minutes each, totaling around 25 hours. The first interview round, before the observational period, aimed at developing an understanding of the work done at the ER and its context. The second round was purposely planned after the observational period to fill in blanks about staff members' perceptions and understandings of contradictions in routine performances and how they dealt with these.

Documents were also collected throughout the study. Organizational documents (11 files, 462 pages) included guidelines, diagrams and internal reports, and were related to the routines in the ER. Public documents (17 files, 189 pages), mostly accessible online, included brochures, laws and regulations, and helped contextualize our study. Visual documents (5), including videos and photographs, described routines and artefacts used in daily work. Personal documents included mainly emails (266) and enabled communication with research participants. Overall, documents served to explore the (in)formal side of the ER, its routines and context.

Data analysis

The analysis of the empirical material proceeded in three stages. In the first stage, using NVivo 11, we coded the data, identifying repetitive sequences of actions. Even if performances varied, the repetition of actions allowed to articulate routine patterns, which we described using narratives (Langley, 1999) and narrative networks (Pentland & Feldman, 2007). We decided to focus on four routines (i.e. triage, diagnosis, treatment and discharge) because they were performed

on almost every patient and thus observed repeatedly; described by staff members and managers during interviews; formalized in documents; and associated to clear outcomes. To illustrate, the triage routine clearly ended with the reporting of the patient. The following routine, i.e. diagnosis, could not start until the patient had been reported, and so on.

We did a second round of coding, exploring the contradictions and associated tensions across routine performances. For example, the ER was divided in sections (internal medicine, surgery, and orthopedics), which only admitted patients falling within their specialty. Yet, some patients presented multiple symptoms, which made it hard to strictly assign them to one section, as they could belong to more than one, creating spatial contradictions: should they be admitted here OR there? Who should have the autonomy and control? Moreover, given the unique nature of cases, who should do what under specific conditions was not easily apparent, triggering tensions between flexibility and compliance. Once done with the coding, we discussed our codes, bringing similar ones under jointly agreed categories or creating new distinct categories. Following this logic, and akin to what Smith and Besharov (2019) call an emic approach, several tensions emerged from the data which we have organized as ‘Learning vs. efficiency’; ‘Flexibility vs. compliance’; and ‘Autonomy vs. control’.

The third analytical stage was informed by the literature on paradox theory, especially Smith and Lewis (2011). Iterating between theory and data (Strauss & Corbin, 1998), we focused on situations where tensions were salient and asked what triggered the tensions and how organizational members dealt with them. We compared routine performances and explored the reasons behind the differences observed. Some performances recurrently followed the routine patterns identified in the first stage. Others did not, putting the routine on hold due to, for example, the lack of experience of a staff member. Focusing on these reasons, we started to identify sources of tension; triggers that rendered latent tensions salient in terms of individual and contextual

factors. We also explored how individuals coped with tensions, identifying alternative patterns that organizational members enacted, which we ultimately grouped into three responses (avoiding, shrinking, and stretching). Having identified triggers, tensions and responses (see Figure 1), we created a narrative using illustrative quotes. Together and iteratively, we engaged in making sure that the narrative made sense.

FIGURE 1 ABOUT HERE

FINDINGS

Hahn and Knight defend that “paradoxes do exist latently and prior to observation, but only in terms of potentialities” (2019:23). We identified three main elements involved in the management of the stability-change paradox in the ER: triggers, salient tensions, and responses. Triggers are the individual and contextual conditions that render latent tensions salient in a particular situation. In our case, the tension between ostensive and performative aspects of the routine becomes salient because of the individuals involved (e.g., their experience) and contextual factors such as resource availability.

Latent tensions are embedded in the way ERs are organized. First, stability of routines enables smooth coordination and service standards maintenance, but variety of patients admitted means that organizational members have to react on the spot. The inherent unpredictability and variety that characterize work in the ER requires leaving room for flexibility to entertain unexpected cases, requiring fine-tuning of existing routines. Major events can also force a complete readaptation of routines (the Covid-19 pandemic a case in point); yet, paradoxically, the more

disruptive the event is, the greater the need for reliable routines to efficiently cope with it and ensure individual accountability. Second, as any other hospital department, ERs need to balance efficiency in the use of limited resources, and effectiveness in providing care for patients. Third, ER functioning requires the collaboration of a mix of temporary and permanent staff, from various professional backgrounds, belonging to different hospital departments, with varying levels of experience and of mutual acquaintance. This can cause tensions with the adoption of deindividualized role structures meant to ensure the smooth functioning (Klein et al., 2006) and the stability of routines (Valentine & Edmondson, 2015). Fourth, some implicit tensions derive from the ER being part of a teaching hospital, which must ensure both effective patient care and student training. Learning in this setting is also complicated by the need to combine a large set of codified theoretical knowledge with the development of embodied, tacit knowledge that can only be acquired through practical experience.

Latent tensions in the ER therefore exist at different levels of the organization. Once triggered, they take different forms and invite organizational members to respond. Responses happen in the enactment of routines and vary depending on the nature of the tensions and contextual factors within which they occur.

The diagnosis routine

During the stay in the ER, a patient is involved in a number of routines. Because of its criticality to the ER operations (and for reasons of space), we focus on the diagnosis routine to explore the experienced tensions and coping responses used by staff members. Figure 2 summarizes the overall routine pattern: the left column lists the routine activities and the right column shows the sequence of activities. Note that the same network displays alternative versions of the routine. For example, sometimes the sequence goes A-B-C-D and some other times it goes

A-C-B-D. The doctor may start preparing to meet the patient before the nurse has called the patient in or vice versa.

FIGURE 2 ABOUT HERE

Once the patient has been triaged and reported to the section nurses, a registered nurse and an assistant nurse take responsibility, writing down their names next to the patient registration in the ledger. One of the responsible nurses checks the room availability (A in Figure 2). When a room is available, either nurse goes out to the waiting room, introduces him or herself and brings the patient in (B). Meanwhile, a doctor has signed up taking responsibility for the patient and may start preparing for the encounter, e.g. by reading up the medical history to get an idea of the patient condition (C).

Once acquainted with the medical history, the doctor meets the patient and starts the clinical examination (D). Based on this, the doctor decides which investigations to do (E). The responsible nurses take lab samples (in the case of medicine or surgery patients) or arrange for x-rays (in the case of orthopedics patients) following the doctor's order (F). Once the samples are taken, the nurse orders the analyses in the system, prints a series of codes with the patient information, tags the samples and sends them to the hospital laboratory through an internal transportation system (or sends the patient to the radiology department for imaging work) (G).

While waiting for the results, the nurse regularly checks on the patient and administers any medication as needed (H). Once the test results arrive, the doctor has more information to decide on a diagnosis (I). Having set a diagnosis, the doctor reports it to the patient and responsible nurses (J), ending the diagnosis routine.

Triggers

Tensions remain indeterminate and they become organizationally salient when enacted and constructed collectively by organizational actors (Hahn & Knight, 2019). In our empirical setting, it was possible to identify three major triggers that rendered latent tensions salient.

Resource scarcity. Scarcity materialized in various ways. Scarcity of staff, for example, meant individuals had to take on roles beyond their own. As expressed by a nurse during a field visit, a lot of people were quitting because they got better-paid jobs and the ER did not have enough staff to cover all roles [field notes]. This meant that who should do what at what point remained largely unclear, triggering tensions.

Apart from scarcity of staff, the availability of beds in hospital wards was always a critical point. It was one of the first issues discussed when starting a shift and staff members would plan how to go about work based on this. One night, pointing at the screen showing a list of all the beds per ward in the hospital, an emergency physician said:

“We have 36 beds. We have three places in the children ward, but we cannot send any patients there; three in maternity, but we can’t send patients there either; three in psychiatry... can’t send patients there either. We have no beds, so I don’t know how we will do this.” [Field notes]

The senior in-house, who had the power to fix the beds’ issue compared to the emergency physician who claimed to be *“responsible for the patients [in the ER] but don’t have power over the beds in the hospital”*, said that the bed administrators had said they had 25 beds available so that was good. The emergency physician, upset, said that was stupid because, as they were not responsible for the patients, they just looked at the number of beds without checking if patients could be sent to those wards. Considering this, that night there were only a handful of beds available

[field notes]. The availability of beds impacted the doctors' decisions in that they had to prioritize urgent or more critical patients and send home patients that would otherwise stay for interns and specialists to learn from or have them stay longer in the ER affecting the lengths of stay, rendering the efficiency versus learning tension salient.

Multiple goals. As part of a University hospital, the ER aimed at providing an effective service to the community and training healthcare professionals. These two goals gave competing prescriptions for action; thus, they were conflicting and triggered tensions. In general, individuals tended to identify themselves with one or another, depending on their personal and/or organizational goals. On the one hand, those coming to the ER on a temporary basis, belonged to other departments and prioritized their own department's and personal agenda of learning. They focused on developing as professionals while doing their internship or specialty training in the ER. The ER was largely considered a training center for junior doctors given that they got to see many cases and experience variety. In terms of how the ER helped juniors learn, a specialist noted:

I think training is the most important. To see a lot of patients and you have to make decisions. Being a doctor is to make decisions and learning which person is sick or which person is not sick or not that sick. When I teach or hold lectures I say "you have to decide in or out, sick or not sick, and then you have to decide what to do". So, you have to make decisions and being a young doctor, [the ER] is a perfect place to make decisions [...] it's the best place to learn." [Specialist, interview]

On the other hand, the ER's permanent staff, emphasizing efficiency, wanted to keep down the length of patient stays. This had to do with an objective of having no patients longer than four hours, from arrival to discharge, in the ER [field notes]. Despite being a learning platform, thus,

the ER (and the University hospital in general) also had to function and survive as an organization and heed to efficiency demands.

Misalignment between role and experience. Performing routines may involve trade-off decisions which are an inherent source of tension. However, these tensions are exacerbated by the misalignment between professional hierarchies and level of experience. This happened, for example, when junior doctors, lacking practical experience but having an inherently superior professional status, were paired with experienced nurses. Central to this trigger was the perception of one's role in relation to the other. A doctor doing her specialty training (ST doctor) noted:

“The roles are defined but whom you are working with plays an important part in the daily operations. If you have a bossy nurse that is telling you ‘step back, I need to run these tests’ and tries to take control of the situation, it is very likely that things won’t run smoothly.” [ST doctor, interview]

Regardless of formal roles, levels of experience can shape the enactment of routines. To illustrate, during a field visit, we observed an experienced registered nurse and a junior doctor working together for the first time. The doctor ordered the nurse to administer certain drug to a patient via muscle/fat; instead of complying with the request, the nurse went online to double check the request, finding out that, actually, the proper way to administer the drug was intravenously. The nurse explained that he chose this course of action because he confided in his own experience in the matter, having previously administered that drug to other patients. Moreover, he implicitly mistrusted this (junior) doctor because of her lack of seniority and because they had not work together in the past [field notes]. This clearly revealed a mismatch between professional hierarchies and individual, embodied experience.

Interestingly, ‘experienced’ informants (regardless of their formal role) stressed their own naïveté and lack of practical capabilities when they first started working in the ER after graduating, highlighting the chasm between theory and practice. A doctor said:

“as a doctor in the ER you almost never know what to do when you get a patient. There is a lot of asking around, and even gambling, trying things you are not sure will work. The clue is to not let the patient die, but besides that nothing is established.” [ST doctor, interview]

Salient paradoxical tensions

As triggers made the inherent tensions that characterized the organization of ER salient, three major types of paradoxical tensions were experienced by organizational members in performing routines: ‘learning versus efficiency’, ‘autonomy versus control’ and ‘flexibility versus compliance’.

Learning versus efficiency refers to the need to ensure effective care for patients and to enable learning by doing on the part of the trainees. This could manifest as a tension between the need to meet the requisite performance standards and teaching neophytes. The two demands were contradictory giving different prescriptions for action where staff members had to minimize patient wait time or ensure adequate care while taking time to teach neophytes. A registered nurse complained:

“[junior doctors] come for three months so every third month you see an increase in the number of patients spending more than four hours in the ER.” [Field notes]

The tension was persistent given the need to ensure the set wait time while concurrently imparting codified knowledge and foster the development of tacit knowledge through learning-on-

the-job typical for a University hospital. Even when doctors went through rigorous training and had completed their residency, they would encounter novel cases, which required them to learn on the go. Setting a correct diagnosis was almost never a trivial task, considering the multiplicity of possible medical conditions, the plurality of symptoms to which they could be associated, and the different individual reactions.

The difficult transition from theory to practice was intensified when actors faced uncertain cases not previously encountered or when an unusual number of emergencies disrupted planning. In these cases, the need for ‘improvising’ could clash with the need of guaranteeing accountability by adhering to routines. Even when role expectations were clearly tied to routines (for instance with reference to diagnostic decision responsibilities), time pressure created spaces for ambiguity:

“[nurses] are not allowed to decide which blood tests should be done. But informally they do so. Sometimes there will be discussions but most often they take that decision; they just say: “Is it okay that I take this?” and the doctor answers, “yes, yes, yes”. But they are not allowed to decide which blood exams or examinations should be done, no.” [Double specialist, interview]

Autonomy versus control manifests when inexperienced actors must decide whether to rely on their own judgment or to request/accept more experienced staff members’ support. This situation can be compounded by the fact that the more experienced colleague could be someone who is – on paper – of lower professional rank (e.g., junior doctor versus senior nurse). Even when a routine is available, it is not obvious to determine what is the appropriate degree of autonomy that a relatively inexperienced actor should display. For junior specialists, making autonomous decisions based on their theoretical knowledge enables learning and avoids decisional bottlenecks, but can be risky for

patients. Conversely, asking for help is a safer option, but can delegitimize junior doctors, impair their learning and cause inefficiencies. An ST doctor highlighted:

“First one month, two months, daytime, I was asking. Then, I stopped. Otherwise you are not gonna be a really good physician if you continue doing this. And many colleagues are doing that. I’m not talking about the [emergency physicians], they take their own decisions alone. But other juniors or even almost specialists, they call and they just check, double check. I think we are in a situation where you have to take a decision. And I think I’m capable of doing that.” [ST doctor, interview]

The paradoxical tension between autonomy and control became salient when staff members engaged in learning on the go. When asked if junior doctors needed to be independent, a senior resident noted:

“[junior doctors] can be independent if they want. When they work at night, they want to admit a patient; they don’t need to ask anyone. If they have a bed place [...] they can just admit the patient. They don’t have to go through one hierarchy first” [ST doctor, interview]

Tied to the learning versus efficiency tension and given that the ER was part of a University hospital, tensions between requirements as a service provider and as a teaching institution surfaced, raising a friction between the need to learn and experiment and the need to control and maximize efficiency, which was reflected in the workload of those who had to do both, i.e. teach and meet the efficiency cut-off point. One senior doctor noted:

“If I’m on an on-call shift, [with an] inexperienced doctor, I know he is gonna take less patients than usual. [...] If it’s like ten patients, I know I’m gonna take seven and he’s

gonna take three. It's gonna be more pressure on me, mentally and physically. [...] he is gonna ask me about [his patients]. And that's demanding, a lot mentally demanding. I get to meet five cases and he tells me about another three cases. Like I met eight patients now. You get my point.” [ST doctor, interview]

Flexibility versus compliance. Given the diversity of organizational members, another prevalent paradoxical tension was between flexibility and compliance with routines. Staff members in the ER followed routines which ensured role clarity and accountability while they had to engage flexibly which implied a degree of role ambiguity. By default, roles were clearly prescribed. For example, a nurse drew the line between what they could and could not do as follows:

“as a nurse we can give some medications on our own: we can give oxygen, [...] pain medication like paracetamol, [...] some kind of opioids [...] morphine [...] nitroglycerine for chest pains and we can give some IV fluids, but I think that's about it what we can give on our own... after that you have to get the approval of a doctor to give for example inhalation for people with trouble breathing, and antibiotics” [Registered nurse, interview]

However, in crisis situations (a frequent occurrence in an ER) tasks must be performed by whoever is available at the moment, rather than based on formal roles. Actual expertise on treating a case took precedence over formal hierarchies. An experienced nurse noted:

“sometimes you have to tell more inexperienced doctors [...], guide them a little bit [...]. Even though it's not our job but to make everything go a little quicker.” [Registered nurse, interview]

Even senior doctors admitted that senior nurses often took on the doctor's role. An ST doctor noted:

“You work [...] with 30 plus, or 40 plus, or 50 plus nurses, with grey hair, they know what they are doing. [...] You feel the flow is much easier [...] Sometimes they even give you a diagnosis [...] Like they see a man coming in: “Ahh, he has a kidney stone”. You seriously open the door, it’s the same they’ve described to you...” [ST doctor, interview]

Nurses intervened autonomously whenever they saw a problem, regardless of formal hierarchies. A registered nurse retold a story as follows:

“[the doctor] wanted to treat the patient with wrong medication. And luckily one of our nurses [...] said: “no, I’m not going to do it”. And the doctor said: “well, I’m the doctor, I’m in charge. You should do this.” And she said no again. And I guess she could do it because she had some experience in this and you know, “this is wrong, we can’t do it.” But it takes quite a lot to say no to... I mean he is a specialist doctor...” [Registered nurse, interview]

At least in ‘frontline’ situations it was the seniority and the weight of actors’ experience that redefined their position in the professional decision-making ladder. This crossing of role boundaries further intensified the autonomy versus control tension. A doctor noted:

“some senior nurses, they’ve been working long, it’s their own place. You get the feeling. The patient comes and she meets him, she comes directly to you and tells you: “You know this patient is not going anywhere. So, it’s better you find him a bed.” Sometimes you feel like they are trying to help you, like giving you a picture before you meet them. Sometimes

you feel like they are doing a role that's not their role. They shouldn't decide, it's up to the doctor to decide. It's this kind of conflict.” [ST doctor, Interview]

Thus, there was a thin line between the formal role, stipulated in routines, and the requirement deriving from the specific situation at hand where the tension endured. Furthermore, the boundaries of one's role became more or less ambiguous depending on the relationship with other actors who were involved in routine performances. A nurse explained:

“[It's] very different depending on who I am, [...] but also depending on the new nurse. [...] if the nurse is coming here with [...] ten years of job experience from another emergency department, you don't have to tell them how to put in an IV line or how to treat the patient. You need to tell them, “These are the routines here”. But if you have new grad nurses doing their first five days on a job, then you have to follow them everywhere to help them take blood samples, help them put in IV lines and tell them everything. [...] some people really like to have control and some people can tell someone: “Can you go away, do that, come back and tell me?”” [Registered nurse, interview]

Responses: coping with tensions

When experiencing tensions, organizational members can employ a repertoire of responses to deal with them, reflecting different attitudes towards paradox and different approaches to overcome their challenges (Berti et al., 2021). In this section, we present how staff members coped with the tensions they faced as they performed routines.

Avoiding. When facing a clinical case that they could neither solve independently nor resorting to others' experience, some individuals tried an avoidance strategy, for example by admitting a patient with an unclear diagnosis, delegating the diagnosis routine to the physicians in a ward. This type of behavior reduced the tension between efficiency (the need to quickly process a large number

of patients, minimizing wait times) and learning (the need to expand one's repertoire to correctly diagnose the illness, so that the patient can be put in charge of the right specialists) in routine performances. The tension was not eliminated but displaced, since the apparent gain in efficiency could result in delays in finding the correct treatment later and in an unnecessary traffic of patients across different wards. As an ST doctor expressed:

“Many [junior doctors] don’t know what they’re doing, seriously, so they just wanna place, put in the patient and then someone else comes the next day, more experienced and does a better investigation.” [ST doctor, interview]

Similarly, during a field visit, a senior emergency physician, faced with a patient condition she had never encountered before, tried first to consult a specialist on the phone; without managing to acquire useful information, she ordered extra blood tests, and ended up referring the patient to the ward, ‘offloading’ the case. In this situation, the experienced tension was avoided, failing to performatively achieve the desired routine outcomes (i.e. assess the case and make an informed decision about which specialist ward refer the case to), but the ostensive dimension was still preserved, ‘going through the motions’ of what is generally expected from the ER.

Stretching. An alternative way of dealing with tensions was stretching routines, which implied expanding routines in content and time. Content-wise, it involved asking for help, internally from colleagues or externally using the on-call system, taking extra samples and ordering extra lab tests, and finding a solution alone. This translated into temporarily adding activities and/or participants to the routine. Through stretching, junior doctors accommodated the push-pull as they struggled with maintaining autonomy, while ensuring someone indirectly controlled the outcome by involving them in the decision-making process. A resident explained:

“If the junior doctor at the A&E can’t solve a serious case or doesn’t know what to do, he calls that other person [advanced ST].” [ST doctor, interview]

In addition to adding content, organizational members also stretched routines in time, as performing extra activities took longer. When doing so, experienced nurses and doctors working with those stretching felt pulled. In particular, this was a common complaint regarding inexperienced staff members:

“it is a big struggle at the beginning in fact. And that’s why new, inexperienced, they can take one patient three hours. And I can understand they want to check every little bit. They want to turn a heavy stone upside down.” [ST doctor, interview]

Stretching could be problematic, because of a regulatory pressure that the ER had to maintain. At the time of the study, there was a national project aiming at reducing wait times in ERs to a maximum of four hours from arrival until discharge, meaning no patients should spend more than four hours in the ER. Stretching routines therefore, despite helping junior staff learn and deal with the autonomy-control tension, was perceived as problematic by permanent staff members, triggering another tension at a higher level (i.e., learning vs. efficiency tension).

Shrinking. Shrinking as a response is the opposite of stretching and means skipping what are deemed ‘unnecessary’ activities. While stretching was mainly used by junior staff, senior staff would employ shrinking to deal with tensions in routine performance. An often pointed out case involved nurses stepping into the doctor’s role and deciding which lab tests to do on a patient, shrinking the diagnosis routine. As a doctor explained:

“[nurses] take, by proxy... it’s like automatically now, they take blood tests directly to save time because they usually do help in making a judgment sometimes.” [ST doctor, interview]

In such cases, shrinking helped deal with the learning-efficiency tension, compensating for the time lost by junior staff members. Taking blood samples before the doctor had met the patient, or without consulting, and knowing that the lab tests represented a bottleneck in the process as they took two hours to be ready, nurses did what they could to speed up routines and minimize the time patients spent in the ER. Another example illustrates this point:

“sometimes, even though you have a lot of yellow patients in the orthopedics section, [...] you have a yellow patient like really, really far down [in the patient list] that hasn’t done the x-ray. [Then] I can ask the doctor: “Do you want me to take him into room 8? You can make a quick examination and send the x-ray [referral]” [...] so he can do the x-ray because I know that they are gonna need it to evaluate the person. So, instead of the patient waiting for four hours to get the first examination and then wait to go to the x-ray, I can make a small adjustment so that they can go to the x-ray and then come down and wait for the result and the result will be done. If you have a lot of patients, you want to make it as smooth as possible for every patient as a whole group instead of just the best for this one patient.” [Registered nurse, interview]

Stretching and shrinking could happen dynamically. A senior specialist recounted how switching the roles performed by routine participants was used as a shrinking/stretching response to the autonomy-control tension:

“During [my internship] I made some surgery. I stood on one side and the experienced nurse stood on the other side. And I made this small operation and she, actually it was her

that was operating. So, she said “mmmh, mmmm, mmmh, mmmm” [he makes sounds as positive, negative, positive, negative, meaning that the nurse was “approving/disapproving” what he was doing on the patient.] “Do you think it looks good now?” [He asked]. “Yes”, she said. Okay, very good. So, it’s teamwork.” [Specialist, interview]

Similarly, as nurses altered the order of routine activities, and stepped into the doctor’s role, they dynamically alternated between shrinking and stretching routines to navigate the flexibility-compliance tension. While some would not ask doctors before ordering tests (i.e., shrink), in general, nurses made use of the power given by their experience to do a task beyond their role (i.e., stretch), but consult doctors, even if only to show respect for the hierarchy. These coping strategies maintained the ‘ostensive’ integrity of the routine, while preserving its performative capacity.

DISCUSSION

Stability and change are central in management and organization studies (Farjoun, 2010) and, more specifically, the routines literature (Birnholtz et al., 2007; Feldman et al., 2016). By focusing on an ER—where change and stability are predominant to its routine functioning—we explored how individuals deal with paradoxical tensions as they oscillate between preserving and altering routines. In so doing, we unpacked the dynamics underlying stability and change, as an overarching paradox, in the routines of an ER. As presented in our findings, to ensure continuity in operations, individuals accomplish routines. To do so, on the one hand, organizational members follow a scripted routine, i.e. each individual knows his or her part and how to do it (Rosales, 2020). On the other hand, the story is different as the combination of circumstances in a particular moment brings forth paradoxical tensions that organizational members deal with as they perform routines because not dealing with the paradoxical tensions means not completing a routine.

Thus, even if it is true that routines *should* be understood as a duality of interdependent and mutually enabling elements (Farjoun, 2010), in practice their ostensive and performative aspects are sometimes experienced by actors as contradictory demands. The ostensive component is not just an abstract representation or a set of formal requirements but represents the way in which particular configurations of the actor network constituting the routine becomes stabilized and black-boxed, turning the routine into an actant. Acknowledging that a routine becomes an actant does not imply reifying it, nor equating it to a rigid sequence of actions. Rather it draws attention to how routines lead to the development of particular patterns or templates, as heterogeneous elements are associated and put in relation (Law, 1999). These invisible patterns can be elastic, in the sense of resistant but flexible, and they have already been identified in other studies. Patriotta and Gruber (2015:1598-9) have shown how routines incorporate “expectancy frameworks” and forms of “typification” which offer cues for sensemaking, “referring the unexpected event to familiar response patterns”. Similarly, Geiger et al. have observed that training in the execution of routines provides organizational actors with a sense of “rhythm [...], the characteristic succession of different paces during a routine performance” (2021:224).

These implicit elements, embodied in actors and actants configurations, do not constitute rigid prescriptions; rather, they frame possibilities of actions, allowing adaptation and improvisation but making some actions more plausible, and acceptable than others. Yet tensions are always likely to manifest, as different actants resist or accept to be associated in a particular configuration. For instance, ER nurses performing a routine can adopt a variety of actions as they adapt to particular conditions (e.g., time pressures, workload, lack of trust in an unexperienced trainee doctor). Yet, their choices are not just determined by ‘performative’ concerns (i.e., ensuring desired outcomes), but also by the need to consider the resistances opposed by the action network that is black-boxed as the ostensive routine. Thus, actions that breach social hierarchies, that contravene formal rules,

or that require unorthodox uses of equipment will be more costly and generate more resistance. When achieving desired goals requires performing the routine in a way that contrast the accepted patterns and rhythms or that causes identity and power clashes, tensions will become more salient.

Paradox literature has shown how individuals dynamically split and integrate paradoxical tensions (Smith & Lewis, 2011). Sometimes they opt for a spatial-temporal separation of poles, having different actors dealing with opposite demands, or attending them at a different time (Poole & Van de Ven, 1989). When this separation is not part of the organizational design, it is not stable, but assumes an oscillatory pattern (Ashforth & Reingen, 2014). Specific to routine dynamics and paradoxical tensions as organizational members perform routines, beyond integration, separation and oscillation, the idea of elasticity is indeed taking hold. In this aspect, we build on Senge (2014) and Burström and Wilson (2018) who use the rubber band metaphor in its simplest form to describe tensions that emerge due to the impact of opposing physical forces. Such tension is associated with cognitive and emotional efforts of actors as they are pulled and pushed by contradictory forces, in our case autonomy vs. control or flexibility vs. compliance. Another treatment of ‘elasticity’ is offered by Gümüşay et al. (2020) who explain how hybrid organizations, which need to attend contrasting logics, create synergies by means of an iterative process of accommodation between organizational and individual responses. In a similar line, our study contributes to the paradox and routine literatures by showing a different form of elasticity, that happens at the level of individual responses to paradoxes as organizational members perform routines. Within this line, we uncover the fact that individuals are able to create synergies between the contradictions deriving from performing routines by treating the same routines as ‘rubber bands’, shrinking or stretching them according to the circumstances.

The rubber band metaphor aptly illustrates the judicious use of a response based on adapting the routine to the specific contextual conditions so that its performative goals can be met, while at the same time being careful not to disrupt its ostensive integrity. A rubber band remains a rubber band regardless of how much it is stretched, provided that the tension does not become so great to cause its breakage. We have also noted that this paradoxical ‘working through’ strategy is not always employed, and that sometimes actors can resort to avoidance strategies. However, also in this case there is a limit to their capacity to employ these defensive tactics (which do not essentially manage the paradox, but simply displace it, delegating it to another organizational unit or member), since a too frequent avoidance would make the ER useless, incapable of performing its diagnostic and first aid functions.

Thus, if avoidance is not an option, management clearly allows for the stretching and shrinking of routines which, according to the need at hand, highlight either the performative (‘whatever works’) or ostensive (privileging consistency and accountability, or choosing the path of least resistance in the actor network associations) dimension of routines. This despite risks in the ER context where decision/indecision means life or death: an injudicious stretching can reduce accountability, lead to uninformed decisions or expose to power abuses. Divergent attempts at stretching and shrinking can also be causes of too much tension and even collapse the symbolic structure that enables collective sensemaking in the ER. Yet, removing spaces for these discretionary adjustments would mean exposing organizational members to pathological pragmatic paradoxes, situations in which oppressive power conditions block any possibility of meaningful action in face of contradictory demands (Berti & Simpson, 2021). Thus, we show that power relations contribute to explain the choices individuals make while embracing the paradoxical tensions of routine duality. In so doing, we contribute to the paradox literature by identifying

conditions that influence the choice of both/and responses and expand previous work on power and paradox by considering the role of seniority and experience. This is relevant because current literature on responding to paradoxes does not consider the experience and seniority of organizational members.

Our case illustrates that it is not always the possession of a particular mindset (Miron-Spektor et al., 2018; Gaim & Clegg, 2021) that determines the choice of a ‘paradoxical’ synergy seeking response (such as stretching or shrinking routines) but also the availability of sufficient resources, in terms of knowledge, relations and power. While the repertoire provides individuals with a spectrum of coping mechanisms to uphold routines, drawing on this means deviating routines from their regular course of action: making them unscripted. In a sense, stretched and shrunk routine patterns are usually associated to different career stages: the higher up in the career ladder, the more experienced in performing the scripted pattern an individual is, therefore counting with the ability to shrink routines (Rosales, 2020). Thus, seniority is one condition beyond mindset because less experienced actors are more likely to be inclined to enact stretched routine patterns in dealing with the lack of experience while senior ones shrink. This suggests that the power to articulate tensions by engaging with them is not only a consequence of formal position but also of professional status and experience. We thus expand Berti and Simpson’s (2021) discussion on the role of power in paradox management by untapping some contingencies that allow individuals to engage with paradox in non-defensive ways.

Beyond seniority and from an organizational perspective, the integrity and usefulness of routines depends on a collective capacity to balance the different ‘rubber band’ strategies: while performing a response means shrinking or stretching the routine out of its original shape, the same response is needed to bring the routine back to its original course of action and shape. Responding

by avoiding a contradiction apparently keeps the rubber band in its “normal state” but, in reality, creates tensions in relation to other units’ routines, that will have to adapt by further shrinking or stretching. Since non-performance is not an option, the rubber band metaphor suggests responses which can aid overall routine maintenance while enabling internal routine variation. In doing so, it shows how routines are elastic because people make them flexible. The fact that people enact them, effortfully, means individuals do try to ongoingly recreate them (Danner-Schröder & Geiger, 2016). This includes drawing on responses which, while possible because routines are not strictly prescriptive, make routines resilient. This supports the claim that individuals can and do change the alternatives available for routine enactment, reconfirming the idea of routines as grammatical models (Pentland & Rueter, 1994). The use of the repertoire of responses influences sequential variety, related to the order of routine activities (Pentland, 2003a, 2003b), and/or performance variety, which points to alternative enactments of the same routine (Danner-Schröder & Geiger, 2016). It also adds to studies that show how individuals develop multiple ostensive patterns in dealing with tensions (D’Adderio, 2014; Sonenshein, 2016), in particular between stability and change (Turner & Rindova, 2012). Exploring organizational routines using the rubber band metaphor thus contributes to our understanding of the dynamics that take place within them and their effects on organizations.

By stretching and shrinking, organizational members dynamically oscillate between scripted and unscripted routine patterns as they follow what is taken for granted and add/remove from what exists to deal with paradoxical tensions. In what is populated by separation and/or integration, shrinking and stretching as responses to tensions complement and expand the repertoire responses (Jarzabkowski & Lê, 2017) and add complexity to the body of literature (Smith et al., 2017). How the shrinking and stretching unfolds is related to a key contingency factor related to the level of experience of organizational members. Similar to Hargrave and Van de Ven (2017), who identified

power dynamics, we uncovered the level of experience of actors and how it influenced organizational members' approaches to dealing with tensions.

CONCLUSION

The emergency room is organized to *routinely* cope with the *unexpected*. Depending on who is involved and the nature of the case at hand, what normally works might not. In such cases, organizational members are compelled to act paradoxically as they modify routine performances by adding to and/or removing from the routines making the ER's work dynamic between stability and change. Central to the stability-change paradox, we have explored how organizational members dealt with paradoxical tensions by shrinking and stretching routines in what we call *the rubber band effect* to handle the paradoxical challenge to stabilize the system while accommodating changes. In doing so, we found out that the adoption of "both/and" responses is not dependent only on a specific mindset (as it is dominant in current paradox theorizing), but on the adequate conditions (for example, power). With the identification of 'rubber band' strategies applied to routines, we contribute to the understanding of how organizational members cope with the paradoxical tensions caused by the concurrent need for change and stability.

While this analysis is limited by a single case study, it is likely to be transferable to a variety of organizations that need to reliably cope with uncertain environments, and where routines need to be performed in a mindful way, as in the case of high reliability organizations (Weick & Sutcliffe, 2006). We therefore contribute to examine routines by working through paradox, the essential mechanism by which the tensions between improvisation and planning, accountability and flexibility, efficiency and effectiveness are navigated in organizations.

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TABLE 1 Data sources

Source	Amount	Total
Observations		
- Field visits	25 visits	136.5 hours
- Field notes	n/a	190 pages
- Meetings/workshops	3	8 hours
Interviews	19	25,35 hours
Documents	33 (266 emails)	651 pages (n/a)

FIGURE 1 Data Structure

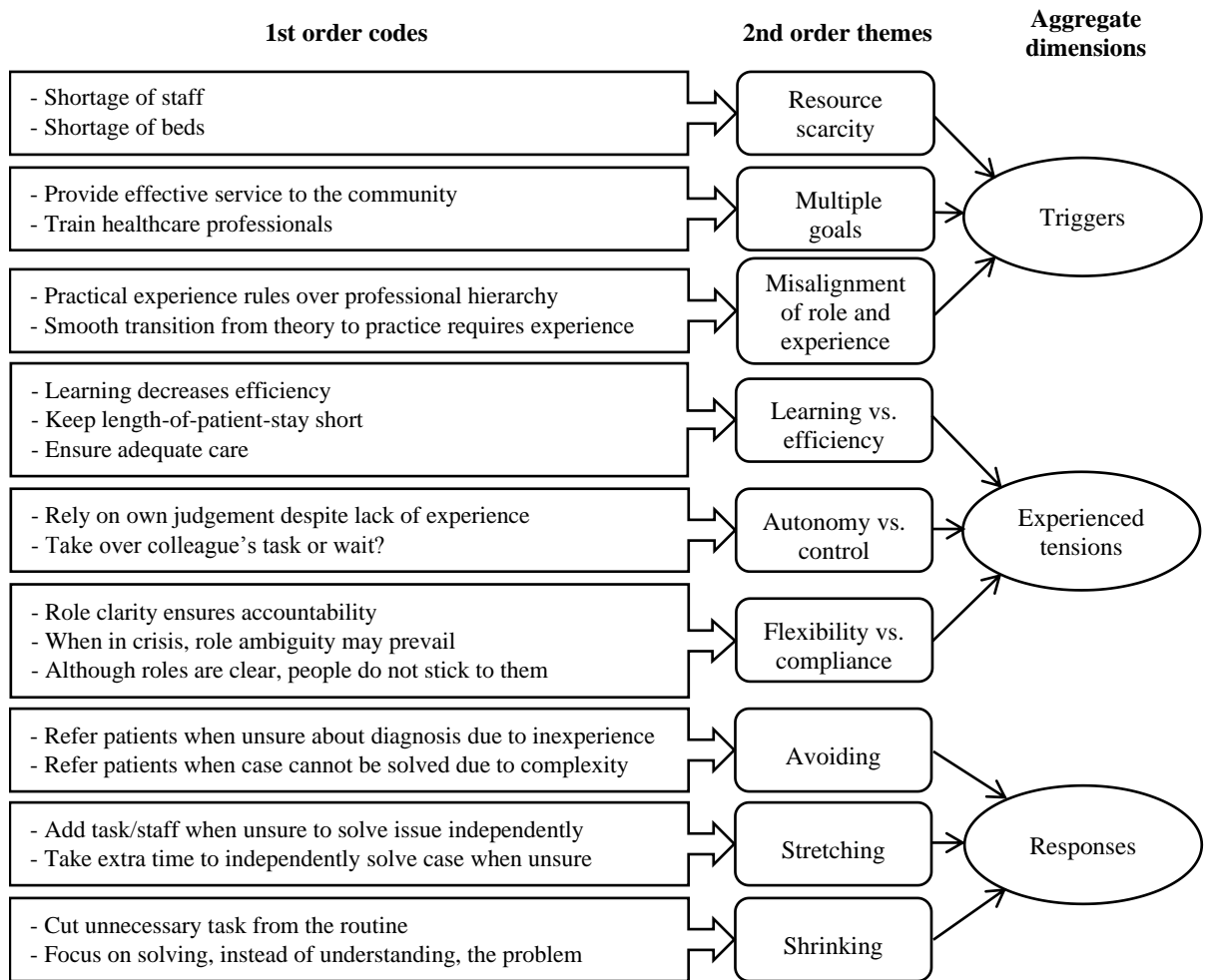
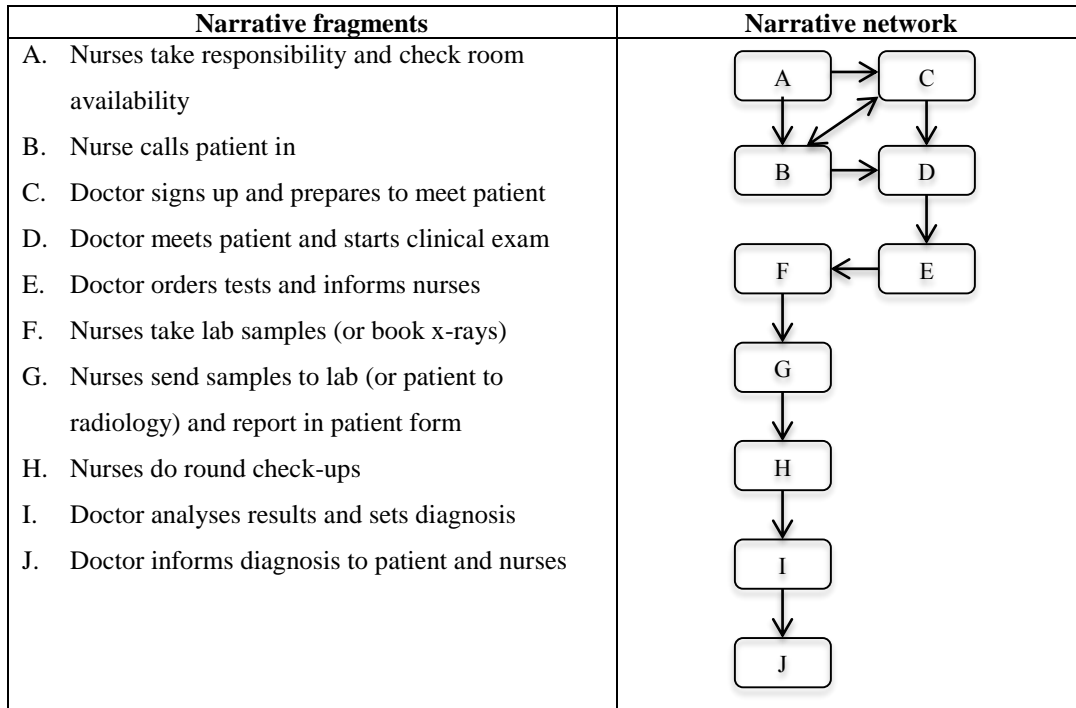
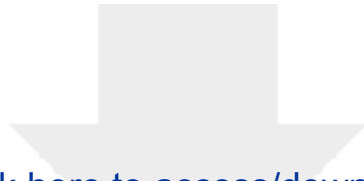


FIGURE 2 Narrative network of the diagnosis routine



CRedit author statement

Virginia Rosales: Conceptualization, Methodology, Formal analysis, Investigation, Writing – Original Draft. **Medhanie Gaim:** Conceptualization, Formal analysis, Writing – Original Draft. **Marco Berti:** Conceptualization, Writing – Review and Editing. **Miguel Pina e Cunha:** Conceptualization, Writing – Review and Editing.



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Supplementary Material
Tables 2-4. Additional evidence.docx

