



# Measuring leadership in electronic messages: how emails content can build or destroy leadership?

# Are you demotivated by unpleasant emails?



**Donald E. Knuth (高德纳),**  
Professor Emeritus of [The Art of Computer Programming at Stanford University](#), welcomes you to his home page.

## Email (let's drop the hyphen)

I have been a happy man ever since January 1, 1990, when I no longer had an email address. I'd used email since about 1975, and it seems to me that 15 years of email is plenty for one lifetime.

Email is a wonderful thing for people whose role in life is to be on top of things. But not for me; my role is to be on the bottom of things. What I do takes long hours of studying and uninterrupted concentration. I try to learn certain areas of computer science exhaustively; then I try to digest that knowledge into a form that is accessible to people who don't have time for such study.

On the other hand, I need to communicate with thousands of people all over the world as I write my books. I also want to be responsive to the people who read those books and have questions or comments. My goal is to do this communication efficiently, in batch mode --- like, one day every three months. So if you want to write to me about any topic, please use good ol' snail mail and send a letter to the following address:

*Prof. Donald E. Knuth  
Computer Science Department  
Gates Building 4B  
Stanford University  
Stanford, CA 94305-9045 USA.*

I have a wonderful secretary who looks at the incoming mail and separates out anything that she knows I've been looking forward to seeing urgently. Everything else goes into a buffer storage area, which I empty periodically.

My secretary prints out all messages addressed to `taocp@cs.stanford.edu` or `knuth-bug@cs.stanford.edu`, so that I can reply with written comments when I have a chance. If I run across such a message that was misaddressed --- I mean, if the message asks a question instead of reporting an error --- I used to just throw the sheets in the wastebasket. But now I save them for scratch paper, so that I can print test material for *The Art of Computer Programming* on the blank sides.

You might also try faxing me at 650-725-4671. But be warned that I look at incoming fax mail *last*, perhaps only once every six months instead of three.

*'I don't even have an e-mail address. I have reached an age where my main purpose is not to receive messages.' --- Umberto Eco, quoted in the New Yorker*

# Receiving unpleasant e-mails...

## Authoritarian leadership

« En conséquence de quoi, je tenais à vous avertir que ***tout collègue qui dérogera volontairement à ses obligations de service en ne se rendant pas aux tâches pour lequel il/elle a été convié-e (et après avoir constaté officiellement sa/ses absences sans motifs valables) devra aller s'expliquer devant la commission disciplinaire.*** NB : je déplore ici l'attitude récurrente de certains collègues qui passent une partie non négligeable de leur temps à contester et à vouloir refaire chaque année les règlements intérieurs ou à jouer sur l'interprétation de textes juridiques pour les détourner à leur seul et unique bénéfice personnel, en jetant ainsi la confusion dans les esprits. »



# Receiving formal e-mails...

## Regulatory leadership

« Madame, Monsieur,

L'Université de XXX vient d'être informée de l'ouverture anticipée de la campagne de délégation CNRS. Vous trouverez ci-joint, une note relative aux candidats à une délégation CNRS au titre de l'année 2015-2016 (demande et renouvellement de délégation). Les dossiers de demande de délégation, ainsi qu'une information, sont accessibles en ligne sur le site web du CNRS et en pièce jointe :

<http://www.dgdr.cnrs.fr/drh/emploi-nonperm/pratique-3-deleg.htm> Les dossiers (un seul fichier pdf) devront être transmis exclusivement par voie électronique à l'adresse suivante : [drh-delegation-contact@univ-lorraine.fr](mailto:drh-delegation-contact@univ-lorraine.fr) au plus tard ... »

# Question: How and why emails develop or destroy e-leadership?

- ▶ **Several studies have highlighted the importance of electronic communications in managing emotions at work and the psychosocial risks attached. They have sought**
  - **to characterize such emails (Créno & Cahour, 2016).,**
  - **to define the effects of dispersion and confusion on users (Datchary, 2011),**
  - **to regulate the uses of emails (Prost & Zouinar, 2012)**
  - **or to understand the intensive uses of emails by managers.**
- ▶ **But few studies have apprehended emails in the form of hierarchical communications to measure the effects of emails on the perception of leadership by employees.**
- ▶ **Nowadays, some employees receive only emails from their managers, without having face-to-face contact with them.**
- ▶ **The aim of this communication is to sum up a research on the influence of emails written by supervisors on the representations that employees have for their work, their involvement and their leader: How and why emails develop or destroy e-leadership?**



# Theoretical background

## “Full range leadership theory”

(Avolio, 1999; Judge & Piccolo, 2004; Yammarino, Dionne, Chun & Dansereau, 2005; Podsakoff, Bommer, Podsakoff, & Mackenzie, 2006; De Vries, Bakker-Pieper, & Oostenveld, 2010; Murphy & Clark, 2016)



**Transformational**

**Transactional**

**Laissez-faire**

# Dimensions of the “Full range leadership theory” (Avolio, 1999).

Leadership	Transformational	Transactional	Laissez-faire
Full range leadership theory (reduced from 8 to 6 dimensions)	<ul style="list-style-type: none"> <li>- Charisma (idealized influence + inspirational motivation)</li> <li>- Intellectual stimulation</li> <li>- Individual consideration</li> </ul>	<ul style="list-style-type: none"> <li>- Contingent reward</li> <li>- Active management by exception</li> </ul> <ul style="list-style-type: none"> <li>Passive avoidant (passive management by exception + not invested in relations)</li> </ul>	



# The effect of different leadership styles on work

## ▶ Motivation represents the energy of our behaviors.

- Employees who work with a transformational leader have better job satisfaction and are more motivated to achieve better performance in their work
- Transformational leadership is able to motivate its employees to achieve better performance
- Transactional leadership can bring about greater employee motivation.
- Both transformational and transactional leaderships seem to increase motivation through interaction with their co-workers.

## ▶ Perceived performance

- important positive link between transformational and transactional leadership styles, and different indicators of objective and subjective performance, whereas the laissez-faire leadership style is negatively correlated with these indicators.

## ▶ Emotional commitment

- It is both a good indicator of job satisfaction, but also a predictor of an intention to leave a company .

## ▶ Organizational justice

- Perceived justice has a positive effect on commitment and job satisfaction within the organization.
- Perceived justice is also a predictor of the quality of the relationship between the leader and his/her employee, particularly of interactional justice.



# Problem and hypothesis

**transformational style email**



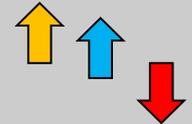
**transactional style email**



**laissez-faire style email**



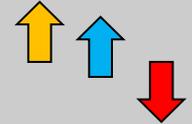
▶ **Emotional commitment to the supervisor:**



▶ **Perceived performance:**



▶ **Motivation to succeed in the project:**



▶ **Perceived interpersonal justice:**



# Method

- ▶ **51 employees were faced with three types of email using expressions extracted from professional emails of 5 employees over three months.**
- ▶ **Sample:**
  - (27/51 men and 24/51 women) executives (21/51) employees (30/51).
  - The average age was 33 years old and varied between 20 and 57 years old.
  - The average time spent on messaging for their job is approximately four hours a day.
  - The employees receive an average of 20.6 emails every day in their job, of which 4.6 emails come from their superior. 62.7% of the people in the sample live with partners and 37.3% are single.
  - Finally, their professional experience averaged at around 9.8 years.
- ▶ **Put yourself in the situation in which you receive emails of type “A, B and C from your superior in the firm’s hierarchy asking you to carry out your work... Read these emails carefully, putting yourself in the state of mind of an employee who receives them”**

<b>Email A « laissez-faire”</b>	<b>Email B ‘transformational’</b>	<b>Email C ‘transactional’</b>
<p>Hello, Please find attached Mr Smith’s file which is a sensitive one. I have been instructed to give it to you to handle.</p>	<p>Hello, Please find attached Mr Smith’s file which is a sensitive one. I know it’s a tricky file and will be challenging for you, but I know that you are capable of dealing with it. You can work on it with John, try a new approach and don’t hesitate to contact me if you have any problems, I’ll be available.</p>	<p>Hello, Please find attached Mr Smith’s file which is the sensitive one we talked about and which I think you can handle. Try to get it sorted rapidly, I’ll take your performance on this file into account during assessment.</p>
<p><b><i>Then the following day a new email, with usual polite forms, and the following elements:</i></b></p>		
<p>I have received a complaint from Mr. Smith about you. I am not concerned so I’m sending it to you to deal with.</p>	<p>I have received a complaint from Mr. Smith. According to him the solutions offered are not satisfactory. I know he’s a difficult customer but I’d like you to take up the challenge. I know you are capable of convincing him and sorting things out. Let me know how things go.</p>	<p>I have received a complaint from Mr. Smith. According to him the solutions offered are not satisfactory. I’d like you to sort this out to avoid any repercussions on the company’s image .</p>
<p><b><i>The day after a new email with usual polite forms and the following elements:</i></b></p>		
<p>I have received your reminders on the Smith file, I’ll send you my conclusions later.</p>	<p>For the Smith file, if you find a new angle don’t hesitate to submit it to me, I’d like to see your report soon.</p>	<p>I’m expecting your report on the Smith file. Our deadlines will have to be met soon.</p>
<p><b><i>Finally, a new email with usual polite forms and the following elements:</i></b></p>		
<p>Thank you for dealing with the Smith file. Good Day.</p>	<p>I’d like to congratulate you on the Smith file, the customer is delighted you’ve done a great job with the team! Good Day.</p>	<p>You have achieved the goal expected for the Smith file. Congratulations. I won’t forget, I will keep it in mind. Good Day.</p>



# Procedure and measures.

## ▶ Emotional commitment to the supervisor:

### ■ 6 items from Vandenberghe & Bentein (2009).

- The items from the initial research were not changed. Here is an example of an item: “I admire my supervisor”.

## ▶ Perceived performance:

### ■ 3 items from Sanchez, Truxillo and Bauer (2000).

- The initial items were changed in order to adapt them to our questionnaire, for example: “I think I have passed the test I have just taken” was changed to “I think I have succeeded in the project assigned to me”.

## ▶ Motivation to succeed in the project:

### ■ 7 items from Sanchez, Truxillo and Bauer (2000).

- The initial items were changed in order to adapt them to our study for example, the item: “If I concentrate and work hard I can get a high score” was changed to “If I concentrate and work hard on this file I can successfully deal with it”.

## ▶ Perceived interpersonal justice:

### ■ 4 items, Colquitt (2001).

- The items from the initial study were not changed. Here’s an example of an item: “My superior treats me with dignity”.

# Results

- ▶ Score averages for each scale according to the type of communication.

Types of emails received	Perceived Interpersonal justice	Perceived performance	Perceived emotional commitment	Motivation to succeed in the project
A-Laisser-faire	<b>1,70</b>	<b>1,46</b>	<b>0,78</b>	<b>1,32</b>
B-Transformational	<b>5.20</b>	<b>5.22</b>	<b>4.86</b>	<b>4.80</b>
C-Transactional	<b>4.21</b>	<b>4.68</b>	<b>2.92</b>	<b>5.00</b>

The results of the Student test validate most of the assumptions: the laissez-faire leadership communication obtained much lower scores than the two other forms of communication on the four variables studied (always  $p < .05$ ).

# Conclusion

- ▶ **The transformational leader possesses specific characteristics which enables him/her to establish a good working relationship with his/her employees.**
  - His/her way of communicating motivates employees to exceed the levels of performance initially planned .
- ▶ **As for transactional leadership, it obtained much higher scores than the laissez-faire leadership communication but lower than transformational, except for the variable - motivation to succeed in a project.**
  - Quite often this type of communication is more focused on economic or material exchange. It focuses its communication on rewards, which motivate employees and is consistent with several studies according to which transactional leadership can bring about high levels of employee motivation.
- ▶ **The “laissez-faire” leadership communication reveals an avoidance of the role of leader, there is very little communication as he/she withdraws from situations in which he/she could be involved.**
  - This lack of communication has a negative impact on the employees’ representations. It obtains much lower scores than the two other types of communication, and for each of the variables tested. Thus illustrating that badly constructed communication weakens organizational performance.



# A Ph.D?

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**Thank you for your attention**

