

Exploring the promotional video of a Chilean Technology Transfer Office: Building trust through attitudinal meanings

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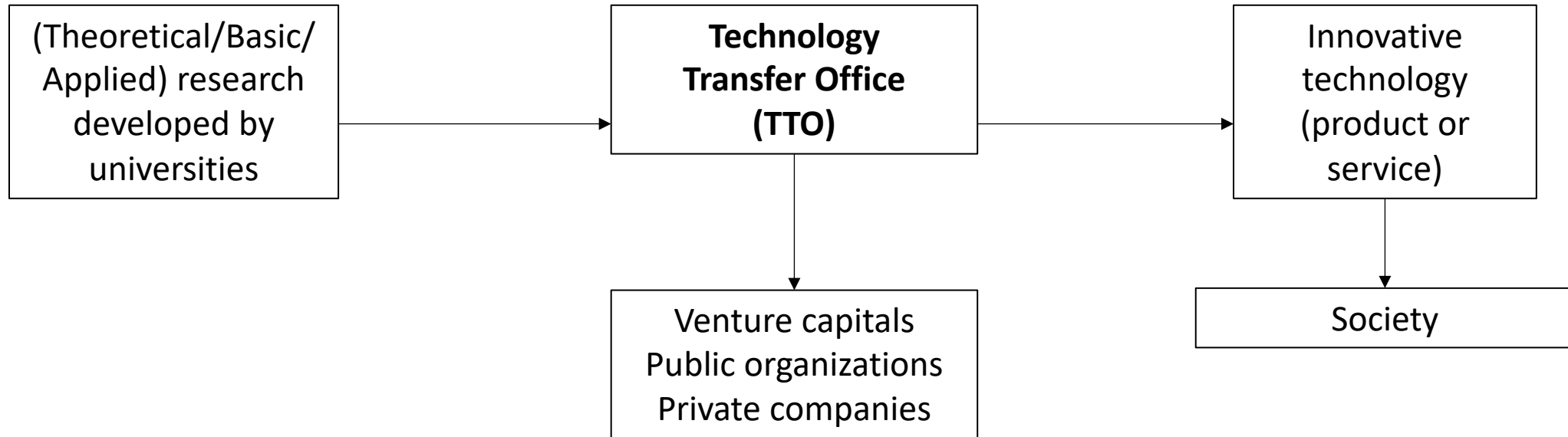
FONDECYT 1170133: The discourse of innovation: Socio-discursive practices in the stages of innovation projects

Ph.D. Thesis:

**Building value in the Technology Transfer discourse:
Appraising in the context of innovation**

1. What is 'technology transfer'?
2. Our approach to 'trust' from linguistics
3. Questions
4. Methodology: toolkit for analysis
5. Results
6. General conclusions

Technology transfer



From a sociological point of view, “Technology Transfer is an activity of economic production that requires high levels of cooperation and interdependence among its participants”

(Pina-Stranger & Lazega, 2011)

...and cooperation implies “trust” among stakeholders (Robbins, 2016)

... organizations (like TTO) use different strategies to show “trustworthiness”

Show video

<https://youtu.be/ocD7TLDE6MQ>

Then... how to analyze trust(worthiness)?

- different approaches to “trust” – most of them using surveys to obtain workers and managers’ perception on trust and good leadership.
- surveys include questions related to ability, benevolence, integrity (Mayer, Davis & Schoorman, 1995)

However

- no systematic description of language patterns that allow creating trustworthiness, e.g. in accounts, press releases or promotional videos
- no description of how different modes of expression (visuals and verbal language) work together to create “trust(worthiness)”, specially in promotional videos, which corresponds to one of the most versatile platforms to share content through social media

Our approach to 'trust' from linguistics

meaning-making
process

different semiotic resources
(van Leeuwen, 1996)

attitudinally
built
construct

eminently evaluative (Martin &
White, 2005)

axiological alignment (Hunston
& Thompson, 2000)

Martin & White, 2005

JUDGEMENT

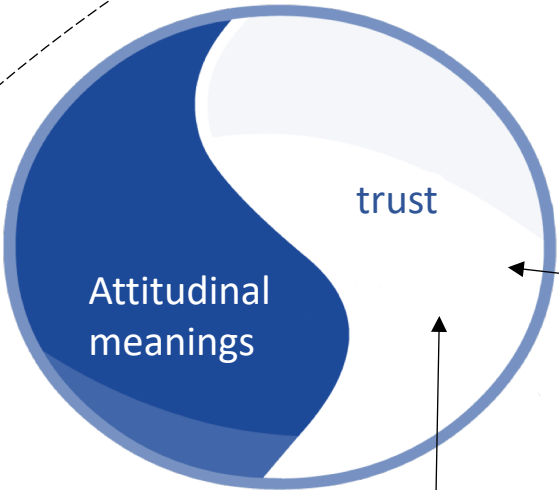
Social Esteem [how normal/capable/resolute sb is]
Social Sanction[how ethical/trustful sb is]

APPRECIATION

Reaction [how I react to sth]
Composition [how I perceive sth]
Value [how I value sth]

AFFECT

How feelings are expressed



semantic
stratum

visual
realizations



verbal
realizations

“We are really **glad**
to work with our
researchers...”

lexico-grammar
stratum

visual
stratum₉

Question and objective

- How is 'trust' bimodally (verbally and visually) built through attitudinal meanings in the promotional video of the Technology Transfer Video of UC?
- [Explore the meaning potential of semiotic resources and] characterize how 'trust' is bimodally built through attitudinal meanings in the promotional video of the Technology Transfer Office of UC

Method: a basic toolkit for bimodal analysis

Preparing data

- Transcription and translation into English of the video description.
- Segmentation of images into shots (Iedema, 2001), using Giphy Capture. (minimal visual unit of analysis)

Processing oral data

- Identification of lexico-grammatical realizations of evaluative attitudinal meanings (Martin & White, 2005)
- Identification of valued entities [UC/TTO]

Processing visual data

- Description of participants (who's depicted in the image)
- Description of the visual structures (narratives / symbolic) (Kress et al. 1996)
- Identification of participants and processes' evocation

Looking for patterns

- Association between participants/processes and Attitudinal meanings
- Identification of patterns of evaluation in both modes and along the text [logogenetically and iconogenetically]

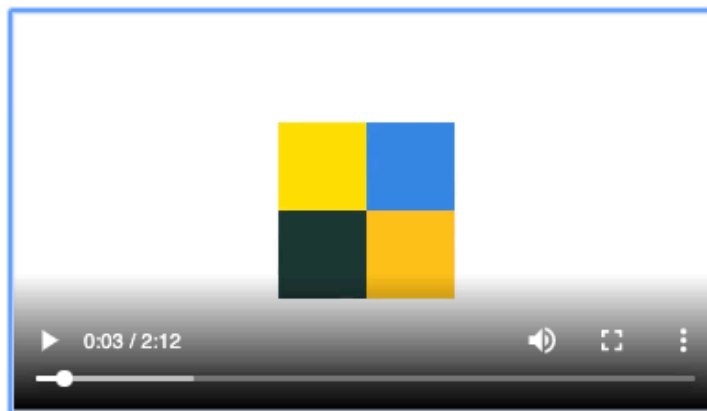
A proposal for exploring 'trust' in the promotional video of a Chilean Technology Transfer Office (TTO)

German Varas E. & Valentin Gerard

The video corresponds to the promotional video of the Direccion de Transferencia y Desarrollo, the Technology Transfer Office (TTO) of Pontificia Universidad Catolica de Chile (PUC). It lasts 00:02:13 (24fps) and it was translated into English, using Aegisub and HandBrake, by the researcher. Each gif animation (15fps) corresponds to one shot (Iedema, 2001), captured using Giphy. During the video, Mr. Alvaro Ossa, Manager Director of the TTO, describes and explains, alternating with a voice-over, the organization's labor. Attitudinal semantic categories for valuation were based on the Appraisal system (Martin & White, 2005) developed within the socio-semiotics framework of SFL (see Oteiza 2017 for a clear description). For associating the visual resources with the semantic valuation categories, we carried out a interpretation exercise, using Kress & van Leeuwen (1996) micro analytical categories. This theory-based interpretation exercise allowed us to deconstruct the concept of 'trustworthiness' and suggest a data-driven set of indicators that may be useful to understand how trust is bimodally and logogenetically built in this promotional video as an instance of the 'discourse of innovation'.

Attitudinal meaning deployment: oral mode

Entity	Judgement: social esteem	Judgement: social sanction	Appreciation	Affect
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Attitudinal meaning deployment: visual mode

Entity	Judgement: social esteem	Judgement: social sanction	Appreciation	Affect
UC				

3.981413

Data-driven set of indicators for rebuilding the trustworthiness construct: a still working-in-progress model

Scientificity	Institutionalism	Innovativeness	Realia & Mise en scene	Pain & medicine	Impact	Testimony	Proximity	Equality
								

<http://www.gvaras.org/public/video/video1.html>

Results: Oral mode

[emphasis on patterns related to JUDGEMENT
attitudinal meanings]

Mapping *Social Esteem* [how capable and resolute sb is]

There is a couple of meanings expressing how resolute (Social Esteem: tenacity) the TTO is towards innovation.

[UC] we are sure that...

[UC] we have taken a firm and decisive step towards innovation...

It's worth noting that it is interesting how a tenacity meaning (realized through **sure**) allows projecting an ethical meaning:

we are sure that // we will improve the quality of life of people

The UC is a 'determined' organization

Mapping *Social Sanction* meanings [how trustful and ethical sb is]

Meanings related to *Social sanction: integrity* are usually realized by verbal groups ([TTO] *impact*, [TTO] *contributing*, [TTO] *transferring*, [UC] *serves*, [UC] *improve*).

Another common strategy to express ethical meanings is through adverbial clauses of purpose:

[TTO] *in order to* positively *impact* on people

[TTO] *with the aim of* *contributing* to society

[TTO] *in order to* *improve* the life quality of people

Purpose is also presented as a grammatical metaphor as in [UC] *our goal is to support researchers (...)*.

OTT/UC has a purpose OTT/UC want to help

Results: Visual mode

[emphasis on patterns related to JUDGEMENT
attitudinal meanings]



Social Esteem: capacity

UC can do
science



TTO has the
knowledge for
transference

Social Sanction: integrity
meanings can be spread
all over the text

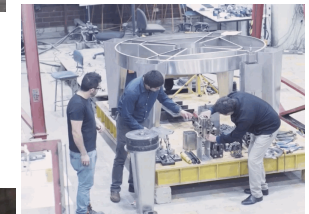
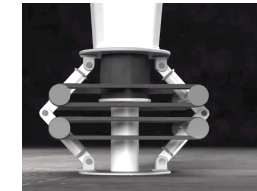
Social Sanction: integrity

TTO is concerned
about 'equality'

The image displays a musical score for a piece titled "Social Sanction: integrity". The score is written in treble clef with a key signature of one sharp (F#) and a time signature of 3/4. It includes various musical notations such as rests, notes, and dynamic markings like *mp* (mezzo-piano), *p* (piano), *rit.* (ritardando), and *pp* (pianissimo). The score is divided into measures, with measure numbers 6, 16, 27, 33, 39, 47, 53, 59, 65, and 71 indicated. There are four video insets overlaid on the score: a woman in a yellow top, a man in a blue sweater, a woman in a purple top, and a man in a white shirt. A vertical list of four icons (a person with a speech bubble, a person with a question mark, a person with a checkmark, and a person with a plus sign) is positioned to the right of the score. At the bottom, there is a performance instruction: "Play what the vocalist doesn't sing." and a tempo marking "Slow".

**Data-driven set of 9 visual indicators
for reconstructing the “trust” construct
in the promotional video of a TTO**

Indicators	Description
Scientificity	Different items related to the academia are depicted, such as scientific articles, conference posters, fully equipped laboratories, scientists wearing white coats, etc.
Institutionalism	Institutional icons are depicted, e.g. religious statues (for example, in the case of Catholic universities), iconic buildings, logotypes, etc. These icons are able to adopt specific sets of values and believes, thus building trustworthiness.
Innovativeness	Participants (+/- human) are depicted as modern, futurist or “innovative”, e.g. complex architectural buildings, state-of-the-art scientific equipment, etc.
Realia & mise en scène	A set of contextual images are shown. Two strategies were identified: <i>realia</i> and <i>mise en scène</i> . In <i>realia</i> , actions are shown as occurring in real time while in <i>mise en scène</i> people (specially workers) are depicted as <i>supposedly working in their everyday environment</i> .
Pain & Medicine	Images related to a specific (social) problem are shown as well as images related to its corresponding solution (for example, a technology).
Impact	Benefits for society (target populations/users) or/and business are depicted, e.g. via animation.
Testimony	Participants’ narratives, often in premier plan, are shown.
Proximity	People are depicted as maintaining some sort of close relationship, e.g. laughing together, backing, etc.
Equality	Possible differences are managed. Racial, ethnic, gender, cultural, class differences are depicted equally in number, screen time, etc.



Final considerations

- This study has tried to show how ‘trust’ is developed through verbal and visual language
- ‘Trust’ is a multisemiotic process in which there is a tendency to exploit attitudinal meanings, especially through JUDGEMENT type of evaluations, i.e. *Social Esteem: tenacity/capacity* and *Social Sanction: integrity*
- The powerful potential of images to evoke meaning allows to propose labels for (re)constructing the ‘trust’ concept
- This investigation may provide other researchers with a basic toolkit to understand how ‘trust(worthiness)’ is visually realized in companies’ promotional videos

Thank you for your attention

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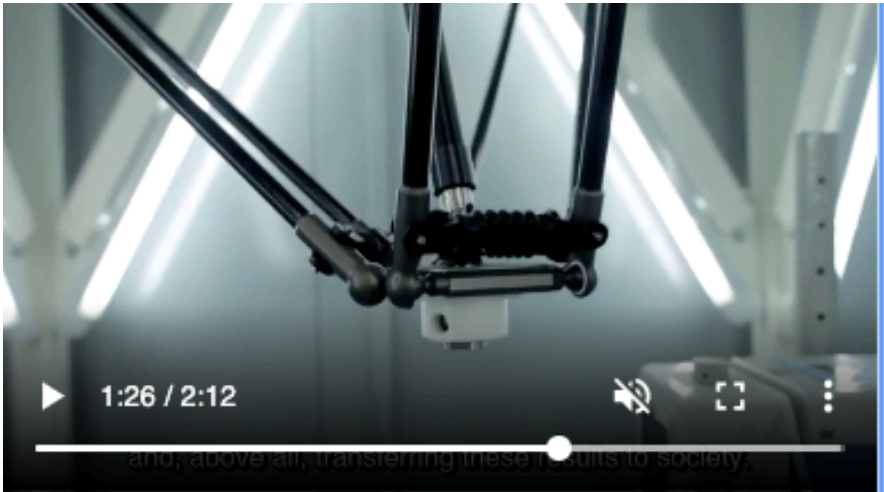
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Backing slides

Attitudinal meaning deployment: oral mode

Entity	Judgement: social esteem	Judgement: social sanction	Appreciation	Affect
		positively impact on people and society		
		with the aim of contributing to the economic and social development of Chile and the World		
	Our goal is to be able to support researchers			
		above all, transferring these results to society		



Social Sanction: integrity

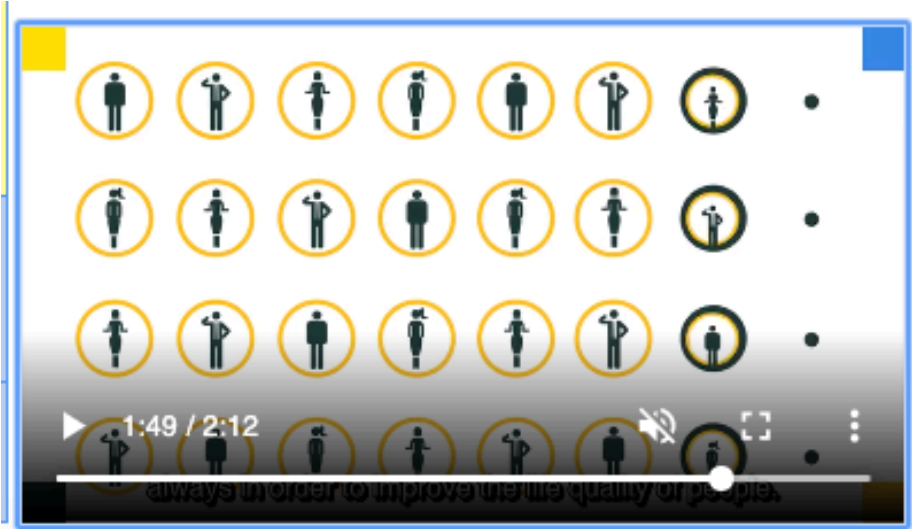
Attitudinal meaning deployment: visual mode

Entity	Judgement: social esteem	Judgement: social sanction	Appreciation	Affect

Appreciation: valuation
→ state-of-the-art equipment

Attitudinal meaning deployment: oral mode

Entity	Judgement: social esteem	Judgement: social sanction	Appreciation	Affect
		and social development of Chile and the World		
	Our goal is to be able to support researchers			
		above all, transferring these results to society		
		always in order to improve the life quality of people		
		we will improve the quality of life of people		
	and we are sure that			



Attitudinal meaning deployment: visual mode

Entity	Judgement: social esteem	Judgement: social sanction	Appreciation	Affect



Social Sanction: “integrity 1”

bimodal attitudinal coupling

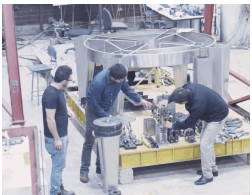

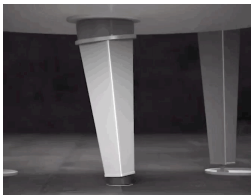

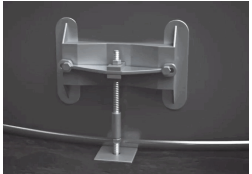








Social Sanction: “integrity 2”

Indicators	Prototypical attitudinal meanings associated by connotation
Scientificity	Judgement: Social Esteem: capacity
Institutionalism	Appreciation: Reaction: quality
Innovativeness	Appreciation: valuation
Realia & mise en scène	Judgement: Social Sanction: veracity
Pain & Medicine	Affect: insecurity (for pain) Judgement: integrity (for medicine)
Impact	Judgement: Social Sanction: integrity
Testimony	Judgement: Social Sanction: veracity
Proximity	Affect: Satisfaction
Equality	Judgement: Social Sanction: integrity

Other examples: The case of FishExtend, the organic film to extend fish’s properties

Scientificity	Institutionalism	Innovativeness	Realia & Mise en scène	Pain & Medicine	Impact	Testimony	Proximity	Equality
								

Other examples: The case of the anti-seismic technology for wineries

Scientificity	Institutionalism	Innovativeness	Realia & Mise en scène	Pain & Medicine	Impact	Testimony	Proximity	Equality
		  				  		

Technology Transfer Office Agents

Basic act	Basic actors	Basic purpose
persuade	venture capitals	<ul style="list-style-type: none"> • to invest in the technologies (in different TRL – technology readiness levels) developed by university researchers
provide	private companies	<ul style="list-style-type: none"> • with solutions in exchange of money
provide	public organizations	<ul style="list-style-type: none"> • with solutions in exchange of money or public recognition
convince	consortia	<ul style="list-style-type: none"> • of investing in the development of certain technologies to satisfy their main needs
encourage	researchers	<ul style="list-style-type: none"> • To apply for public funding for applied research • To develop technology to satisfy the industry needs (demand pull logic) • To make strategic commercial alliances with the industry • To license their technologies • To create spin-offs
orient	faculty technology managers	<ul style="list-style-type: none"> • To suggest applied research niches and coordinate possible work along with the industry
motivate	students	<ul style="list-style-type: none"> • to develop Ph.D. research in areas of impact for the country's development
make	lawyer buffets	<ul style="list-style-type: none"> • find the best technology protection and commercial strategy
ask	IP public institution (INAPI)	<ul style="list-style-type: none"> • for mutual contribution and public recognition
nourish	technology hubs	<ul style="list-style-type: none"> • with ideas on possible technology developments and investment niches
ask	technology advisors	<ul style="list-style-type: none"> • for recommendations about the best way to create value for a technology

MODEL FOR STUDYING ATTITUDINAL MEANINGS

(Martin & White, 2005)

JUDGEMENT

ethics

Social Esteem

Social Sanction

how special sb is
how capable sb is
how resolute sb is

how trustful sb is
how ethical sb is

lucky, eccentric
competent, productive
brave, perseverant

honest, credible
sensitive, respectful

APRECIATION

aesthetics

how we react to sth
what is our perception regarding sth
how we describe the value of sth

honest, credible
sensitive, respectful

AFFECT

emotions

how confident sb is
how satisfied sb is
how happy sb is
what desires are wished

confident, comfortable
pleased, impressed
cheerful, love
long for, yearn for

Social Esteem: capacity



Social Sanction: integrity



Social Sanction: veracity

