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Challenging the Ontology of Technoscientific Artefacts: Actor-Network Theory in the Context of Developing Countries

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1. Introduction

The new **ontology** of ANT has the potential to open up a new perspective on the way developing countries encounter technoscientific objects.

2. The ontological challenge of the Actor-Network Theory

Diffusion Model

Technoscientific artefacts come to developing countries in forms that are seemingly determined a priori in the sphere of Nature, by neutral universal laws that are non-human and removed from history.

2. The ontological challenge of the Actor-Network Theory

Technoscientific artefacts as propositions: while they move within space and time, and conform to fact or fiction, they are modified and are **translated-transferred.**

3. ANT and lines of flight from the diffusion model

The most productive way in which the colonizer-colonized can make use of established knowledge is to obtain more suitable means for exploiting **lines of flight (Deleuze & Guattari, 1980)** from naturalized references and frameworks.

4. The “multimistura” (multimixture) case

a nutritional supplement obtained from bran, and dark leaves as well as other low-cost ingredients such as seeds and eggshell powder.



4. The “multimixture” case

At least three stories can help understand the chronological list of events:

1st story) provides a means of setting out a **reduced ontological framework** by means of which one can epistemologically distinguish, in a radical way, between science and belief, and wisdom and ignorance.

SALVANDO VIDAS

A menina Lindacy, quase pele e osso ao nascer e com 15 quilos aos três anos de idade, graças à multimistura



4. The “multimixture” case

At least three stories that can help understand the chronological list of events) that have been outlined:

2nd story) broadening the scope of ontological space by making **claims for symmetry**

How can one displace these constraints that are imposed on relativism in the second story? In other words, how can a third story in this case, set a line of flight from the territory that has been delimited by a closure of the scientific controversies?

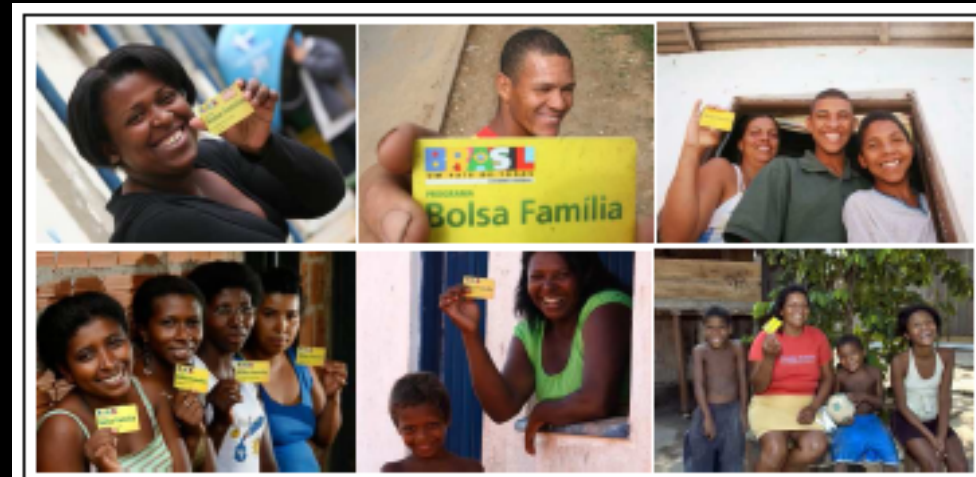
4. The “multimixture” case

At least three stories that can help understand the chronological list of events) that have been outlined:

3rd story) away from the **ontological territory of the colonizers**

Other ontologies may be enacted and define other alternative territories where the weapons of the nutritionist scientists do not have the same effect and where the closure of the scientific controversies is a less relevant and determinant factor.

5. The ANT approach regarding Information and Communication Technologies (ICTs): the case of the PBF – “Programa Bolsa Família” (Family Assistance Program)



5.1 *From person to code, from code to person*

informal economy is difficult to frame and classify, since it occurs in numerous ways and fails to conform to established standards.



5.1 From person to code, from code to person: framing the 'odd job' (how to classify economic informality?)

Qualificação profissional

242 - Situação no mercado de trabalho

- | | | | |
|---|--|--|-------------------------------------|
| <input type="checkbox"/> 1 - Empregador | <input type="checkbox"/> 4 - Autônomo com previdência social | <input type="checkbox"/> 7 - Trabalhador rural | <input type="checkbox"/> 10 - Outra |
| <input type="checkbox"/> 2 - Assalariado com carteira de trabalho | <input type="checkbox"/> 5 - Autônomo sem previdência social | <input type="checkbox"/> 8 - Empregador rural | |
| <input type="checkbox"/> 3 - Assalariado sem carteira de trabalho | <input type="checkbox"/> 6 - Aposentado/Pensionista | <input type="checkbox"/> 9 - Não trabalha | |

243 - Nome da empresa em que trabalha, se desempregado, último emprego | 244 - CNPJ/CEI da empresa | 245 - Data de admissão

246 - Ocupação

247 - Remuneração deste emprego

248 - Renda de aposentadoria/pensão

249 - Renda de Seguro-Desemprego

250 - Renda de pensão alimentícia

251 - Outras rendas

R\$

R\$

R\$

R\$

Características da família

252 - Tempo de moradia

| | | |
|--|--|--|
| | | |
|--|--|--|

(Ano(s))

| | |
|--|--|
| | |
|--|--|

(Mês(es))

Despesas mensais da família (preencher somente para a mãe/responsável legal da família)

253 - Aluguel

254 - Prestação habitacional

255 - Alimentação

256 - Água

257 - Luz

R\$

R\$

R\$

R\$

R\$

258 - Transporte

259 - Medicamentos

260 - Gás

261 - Outras despesas

262 - Número de pessoas que vivem da renda desta família

R\$

R\$

R\$

R\$

Job and "income"

5.1 From person to code, from code to person: framing the 'odd job' (how to classify economic informality?)

“And now what? What do I register?”

Health Agent (interviewer)

5.1 From person to code, from code to person: framing the 'odd job' (how to classify economic informality?)

| <u>Situation in the Job Market</u> | <u>No.</u> | <u>Percentage</u> |
|---|-------------|-------------------|
| 9 – Not working | 3114 | 66,41% |
| 2 – Formally employed with regular salary | 451 | 9,62% |
| x – No answer | 268 | 5,72% |
| 3 - Informally employed with regular salary | 224 | 4,78% |
| 10 – Other | 222 | 4,73% |
| 6 – Retiree/Pensioner | 174 | 3,71% |
| 5 – Freelance without Social Security | 140 | 2,99% |
| 7 – Rural worker | 84 | 1,79% |
| 4 – Freelance with Social Security | 11 | 0,23% |
| 1 – Employer | 1 | 0,02% |
| 8 – Rural employer | 0 | 0,00% |
| <u>Total number of adults(active registrations)</u> | <u>4689</u> | <u>100%</u> |

5.2 Some conclusions

the acceptance of ANT's ontological challenge means questioning the logical sequence proposed by more traditional knowledge and information theories :

data ⇒ information ⇒ knowledge ⇒ wisdom

5.2 Some conclusions

“data” cannot be said to be logical and objective, or simply given.

**one should think of databases
as bases of negotiations.**

5.2 Some conclusions

ANT enables an in-depth analysis of the implications of technoscientific artefacts, which entails the continuous monitoring of overflowing effects, i.e. of what falls out of their inherent **framing ontological categories**