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On equal footing? The impact of patient companions on Lifeworld integration and patient-centeredness in linguistically diverse emergency consultations

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Abstract

Introduction Patient companions (PCs) can have an ambiguous impact on the quality of communication during multilingual medical consultations and therefore on health outcomes. Studies of multilingual medical consultations have focused mainly on PCs' role as interpreters, with less regard to other roles they may take up. This paper uses mixed methods to investigate PC role dynamics in multilingual PC-mediated consultations and how they affect the management of a patient's Lifeworld, a crucial element for history taking and rapport building.

Methods Nine recordings of multilingual PC-mediated consultations from a Brussels emergency department, complemented with ethnographic notes and clinician interviews, were subjected to linguistic-ethnographic analysis and a codification of communication patterns and PC roles to explore the link between PC roles and Lifeworld management. PC roles were grouped into four stances (Linguistic agent, Lifeworld agent, System agent, and Principal). The communication patterns were grouped into three categories ("strictly medicine", "Lifeworld heard/included", and "Lifeworld interrupted").

Results In ED consultations, patients' Lifeworld frequently remains inadequately addressed, primarily due to physician interruptions. Significant associations are observed between roles taken up by PCs and the way patients' Lifeworld is managed. Successful integration of Lifeworld aspects is best supported by PCs taking up the role of System agent, possibly because it allows them to link the Lifeworld directly to medical issues. Linguistic-ethnographic analysis reveals how language barriers, PC role changes and Lifeworld management strategies are taking shape organically (often implicitly) determined by a wide range of situational factors, such as the complexity of the topic, the available (non)verbal linguistic repertoire, the level of meta-communication, explicit role negotiation and timing.

Conclusion Since poor Lifeworld management negatively impacts care, clinicians should be trained to detect and manage role dynamics and relevant situational factors in PC-mediated multilingual consultations to protect patients' right to high-quality communication and healthcare.

Introduction

The absence of a fully shared language between a patient and a clinician significantly contributes to health disparities [15, 27, 43]. Language barriers can inter alia lead to inaccurate diagnoses, improper medication administration, and inadequate follow-up (e.g., missed appointments). The literature generally recommends the use of

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trained interpreters to overcome challenges associated with language barriers in healthcare settings [39]. However, using trained interpreters in the emergency department (ED) is often challenging due to organizational, time, and financial constraints [10], as well as the lack of prior information on patients' language skills [28].

In the ED, physicians frequently rely on patient companions (PCs) who act as ad hoc interpreters or use no interpreters at all to manage consultations across a language barrier [10, 34, 35]. The literature considers the use of untrained ad hoc interpreters to be a bad practice however, as they commit more errors than trained interpreters and often inadvertently omit information that is crucial to medical practice [12, 36]. These errors typically go unnoticed. Ad hoc interpreters have also been found to be highly prone to role conflicts [4, 41]. Furthermore, uncertainty about the companion's relationship with the patient frequently complicates the assessment of the reliability of the provided information: clinicians may assume that companions are family members, even if they are not [10, 11].

A survey revealed a strong perception among ED clinicians that the presence of PCs may hamper conversations on sensitive issues, leading to delays in care or diagnostic errors [46]. At the same time, research has shown that PCs may as well enhance communication with clinicians in the ED, particularly for patients with lower literacy levels [5, 6, 42]. One dimension that has been particularly highlighted in the literature is PCs' role in reducing patient anxiety, shifting the power balance in the patient's favor, increasing attention given to Lifeworld issues in consultations, and facilitating shared decision-making [22].

The management of Lifeworld issues in a medical consultation is an important aspect of clinician-patient communication. In this study, 'Lifeworld' refers to the personal and cultural context that shape personal healthcare experiences and perceptions patients bring to a medical consultation.[1] Effective Lifeworld management involves integrating these contextual elements into the consultation to ensure patient-centered care. As set out by Greenhalgh et al. [22], while there is clearly some tension between the biomedical agenda and the patient's Lifeworld agenda, not least due to time constraints, "*Lifeworld information is essential for accurate diagnosis and effective treatment decisions*", as it provides the contextual information in which health problems play out. Giving space to Lifeworld elements is key for patient-clinician rapport building and, more broadly, achieving patient-centered care and shared decision-making, especially in the case of more complex health problems [3, 22] or anxious patients [29, 48].

In the ED, misalignments between the medical world and the Lifeworld frames are intensified by, on the one hand, strict time constraints, which sometimes lead physicians to prioritize medical aspects over relationship building, and, on the other hand, patients' heightened stress, anxiety, and need for reassurance [48]. Language and cultural barriers present a further exacerbating element. They challenge the communication process and therefore also the opportunities for physicians and patients to negotiate misalignments of interaction frames (e.g., voice of the Lifeworld versus voice of medicine) and expectations, making it more difficult to reach convergence [11].

A few papers have addressed the challenges of Lifeworld management in triadic consultations, which involve trained or untrained (mostly family) interpreters in multilingual contexts. Both types of interpreters have been found to offer benefits but also possible disadvantages. Greenhalgh et al. [22] find that trained interpreters are more likely to help push the medical agenda forward, while family interpreters are more likely to offer Lifeworld elements. Leanza et al. [31] characterize four different communication patterns with respect to how patients' Lifeworld is included in a medical encounter (e.g., "Lifeworld rationalization", "mutual Lifeworld", "integration of medicine and Lifeworld", or "referral") based on earlier work by Barry et al. [3]. They find that reliance on a trained interpreter is likely to result in better integration between the voice of medicine and the voice of the Lifeworld than reliance on an untrained interpreter or no interpreter at all. Their study suggests that an untrained family interpreter is more likely to contribute additional Lifeworld information but could also conceal some Lifeworld elements.

Nevertheless, many knowledge gaps remain in our understanding of how untrained interpreters, including PCs, influence communication during healthcare consultations and, ultimately, care quality. In particular, the literature on how the different roles PCs may take up during a medical consultation affect the quality of communication and health outcomes remains relatively limited. In monolingual settings, and particularly in pediatric or geriatric settings, some studies have pointed at the active role played by PCs in volunteering information and speaking for the patient [2, 45]. Fioramonte and

[1] To Habermas [24], the 'Lifeworld' represents the background of ordinary life: the everyday social world in which individuals interact with others and organize their lives, in contrast with the 'system', which refers rather to the more institutional sphere that comprises the economy and the state and is characterized by strategic action, as in a medical consultation. Mishler [37] provides a seminal discussion on how the Voice of Medicine (the technical side of medicine) and the Voice of the Lifeworld (the more personal context of health issues) interact during a medical encounter.

Vásquez [16] demonstrate PCs may also engage in co-constructing an understanding of the patient's condition in other healthcare settings (e.g., neurology and rheumatology) across a wider range of age groups. In multilingual settings, however, existing studies on PCs have usually focused on the PC's role as interpreters, considering other roles taken up by PCs as digressions from good interpreter practice with potential clinical implications rather than for their own potential value [12, 18, 19]. An exception includes Li [33], who highlights how family interpreters bring 'conflicting identities' to the medical interaction, including their social role as family member and/or caregiver, which means they bring relevant knowledge on the patient. At the same time, Li [33] also observes how family interpreters are more likely to speak on behalf of the patient, and reduce or omit information while translating.

To gain a deeper understanding of the impact of the different roles taken up by PCs on medical interactions in multilingual settings, this study explores the impact of PC role dynamics on the management of Lifeworld issues. To this extent, it combines and extends two frameworks developed earlier: one by Leanza [30] on roles/stances taken up by (trained) community interpreters in medical settings and one by Leanza et al. [31] on communication patterns with regard to Lifeworld management in medical consultations (see above). These frameworks are applied to a dataset on medical consultations from an emergency department in Brussels, Belgium.

The three major questions addressed in the paper are as follows:

1. What roles do PCs play?
2. How is the patient's Lifeworld incorporated or excluded in communication between patients, physicians, and PCs?
3. How do these communication patterns and roles interact during consultations?

Methodology

Research design

The study adopts a conversion mixed method design, combining quantitative and qualitative methods [47]. Transcripts from audio-recorded consultations were coded and then analyzed quantitatively. This analysis was combined with a qualitative analysis of the transcripts and corresponding field data (from ethnographic observations and after action interviews) to help bring meaning and nuance to the quantitative results.

The qualitative and quantitative data analyses were carried out by a multidisciplinary team of psychologists, linguists and medical professionals from Belgium and Canada. The combination of statistical and ethnographic analysis and the diverse backgrounds of the researchers (in terms of nationality as well as professional background) helped to achieve cross-fertilization between disciplines and knowledge communities and ultimately a more comprehensive and nuanced understanding of the complex communicative dynamics present in the consultations under study [8].

Data collection and transcription

The data consisted of nine audio-recorded multilingual PC-mediated medical encounters in the ED of an inner-city hospital in Brussels, Belgium. Initially, ten recordings were selected from a larger corpus comprising 130 recorded consultations accompanied by ethnographic notes and post-consultation "after action" interviews with physicians [7]. The selection of the 10 cases was based on convenience sampling according to the language specialists we found to translate and contextualize the foreign language utterances. The selected recordings all represented multilingual PC-mediated consultations. The consultations were transcribed by the first author and translated by native speakers of the relevant language (variant). One recording was excluded due to the patient's delirious state induced by a brain tumor. Table 1 presents an overview of the nine records included in the analysis.

Coding and quantitative analysis

Two coding methods were used for the quantitative analysis: one on PC roles and one on communication patterns with respect to Lifeworld management.

PC roles were coded using a typology adapted from Leanza [30] and extended. Leanza [30] distinguishes several interpreter stances, each encompassing different roles. Whereas a 'role' refers to the specific function or set of actions that a PC performs during the consultation, such as translating or advocating, a 'stance' represents the broader attitude or approach the PC adopts. In particular, the *Linguistic agent* stance implies a certain level of restraint, where interpretation tasks are prioritized, i.e., the conveyance of discourse and its meanings between interlocutors, and a certain level of impartiality and neutrality is pursued. As a *System agent*, the interpreter upholds institutional discourse, symbolically aligning with clinicians' objectives, and focusing on biomedical objectives. Both stances confirm the dominant discourse or status quo in practice, potentially disregarding, denying, assimilating, or denigrating important Lifeworld elements such as cultural differences. In contrast, the *Lifeworld agent* stance involves the PC acting as an explainer, advocate, or

Table 1 Characteristics of the consultations

#	Description	Patient		Language(s) spoken by patient	Companion(s)	Clinician(s)
		Sex	Age[a]			
1	Iraqi patient with unknown condition	F	70–80	Arabic	Patient's daughter and granddaughter who speak only Arabic Female neighbor, also from Iraq, who speaks French as a second language	French-speaking female surgeon French-speaking female internist
2	Moroccan patient with unknown condition	F	30–40	Moroccan Arabic	Two women who speak French and Moroccan Arabic (relationship to patient unknown)	Dutch-speaking female medical student, speaks some French as a second language
3	Pakistani patient with kidney stone	M	20–30	Urdu Pakistani Punjabi	Man who speaks English, Urdu, and Pakistani Punjabi (relationship to patient unknown)	Dutch-speaking male physician, speaks English as second language
4	Somali patient with tuberculosis	F	40–50	Somali	Woman who speaks Somali and French as a second language (relationship to patient unknown)	French-speaking male surgeon French-speaking female nurse
5	Moroccan pregnant patient with sexually transmitted infection	F	20-30	Moroccan Arabic	Patient's Moroccan husband who speaks Moroccan Arabic and French as a second language Their baby	French-speaking male internist French-speaking female nurse
6	US patient with infected toe	M	20–30	English	Patient's teacher from USA, English native speaker, speaks French as second language	French-speaking female nurse French-speaking female physician who speaks English as a second language
7	Moroccan man with gout	M	70–80	Moroccan Arabic	Patient's two Moroccan sons-in-law who speak Moroccan Arabic and French	French-speaking male internist
8	Italian woman with foot sprain	F	70–80	Italian	Patient's son who speaks Italian and French as a second language	French-speaking female surgeon
9	Moroccan patient with mastitis	F	20–30	Moroccan Arabic Berber	Male companion who speaks Berber, Moroccan Arabic, and a bit of Spanish and French (relationship to patient unknown)	French-speaking male internist with a good command of Spanish French-speaking female gynecologist

[a] Researcher's own estimate

negotiator of cultural differences, aligning more closely with the patient's position.[2] This stance moves away from the impartiality principle certain professional interpreters are bound by, validates difference and seeks meaningful compromises [30]. Finally, a new stance was added, namely, one where the PC speaks on behalf of the patient, without involving the latter. It is referred to as the *Principal* stance, in line with Goffman's participation framework theory, where the principal is the one whose beliefs are represented by the words spoken [21]. Note that, even if the principal has the intention to convey the patient's experiences as accurately as possible, the fact that (s)he speaks on behalf of the patient without consulting the latter implies that (s)he provides his/her own subjective perception and (often partial) understanding of the situation and generates a risk of misrepresentation of the facts.[3] Table 2 presents the different roles and their definitions, grouped by the different stances.[4] Roles and stances can vary dynamically over the course of an interaction.

[2] The *Lifeworld agent* stance is referred to as *community agent* stance in Leanza [30]. Leanza [30] sets out a fourth stance, the *integration agent* stance, but this is not considered here as it encompasses roles that take place in everyday life, outside of consultations, and thus remain outside of the scope of the current analysis.

[3] While other PC roles like "Interpreter" or "Mediator" function primarily as "animators" in Goffman's terms, simply relaying or explaining information, the "Principal" takes ownership of the position being expressed. Other roles like "Bilingual Professional" can also involve aspects of this "Principal" stance.

[4] In this paper, when we refer to "interpreter" as a role, we consider a person (temporarily) engaging in the activity of "interpreting" in its narrowest sense, notably, by verbally translating spoken language from a source language to a target language in real-time, aiming for semantic equivalence without changing the original message. When we refer to "family interpreter" or "trained interpreter" elsewhere in the paper, we refer more broadly to the person who is asked/expected by others to take up the role of interpreter, but may as well take up other roles over the course of the interaction.

Table 2 Codification of companion's stance and roles

Stance	Role	Description
Linguistic agent	Interpreter	• The companion acts like an interpreter without intervening in the dialog. • The companion is as discrete and unobtrusive as possible, avoiding any level of personal involvement, in order to facilitate clear and comprehensible communication.
	Active interpreter	• The companion acts as a particularly pro-active interpreter, by actively engaging with the interlocutors prior to interpreting, frequently asking for clarification/confirmation, and using reformulations and *transexplanations* [a] to support understanding.[b] • The focus remains on points of order or details rather than entering a true mediator role with broader discussions on the meaning of a particular intervention or practice.
Lifeworld agent	Cultural informant	• The companion acts as cultural advisor for the clinician and the patient.
	Mediator	• The companion tries to expand, explain, synthesize or adapt the clinician's questions and the patient's answers when the terms/expressions used are different from those used in the patient's or clinician's culture or when the terms are too medical.
	Advocate	• The companion acts as an advocate for the patient and seeks to ensure that the patient receives the best care possible, sometimes even opposing the clinician or rejecting questions that he feels minimize the severity of the patient's condition. • The companion teams up with the patient, even making decisions together – sometimes up to the point of pushing the patient to agree. • The companion can put additional pressure on the clinician to be more attentive to the patient's condition.
	Close informant	• The companion acts as a close caregiver to the patient and spontaneously provides information about the patient (e.g. cultural background, country of origin, type of work, family information, language, habits, etc.). • The companion corrects or complements answers provided by the patient, since (s)he believes knowing him/her well enough, often without making the patient/clinician aware.
System agent	Bilingual professional	• The companion becomes the clinician: (S)he conducts the interview in his/her own language, referring to the clinician afterwards. • The companion adds questions or gives additional medical information to the patient. • The companion may also encourage the patient to follow the physician's directions or disclose information that would be medically useful. • The companion may source from his/her own medical training, or from experience with the routine of these consultations. • As explained in more detail in Leanza (2005), this role is the counterpart of that of *Advocate*: the companion acts as agent or spokesperson of the healthcare system, as if (s)he were a healthcare professional, possibly at the expense of certain values/practices of the own community, and is therefore referred to as a *professional*.
	Monolingual professional	• The companion positions her/himself as a health and/or migration professional at the same level as the clinician and expresses her/his own points of view or hypotheses to the clinician. • The companion addresses the patient in the patient's language, positioning her/himself as a professional. These exchanges are not translated into the other language. • As above, the companion acts as agent of the healthcare system, as if (s)he were a healthcare professional, possibly at the expense of certain values/practices of the own community, and is therefore referred to as a *professional*.
Principal	Answers for patient	• The companion answers the clinician's questions for the patient, reflecting his/her own views and perceptions of the patient, without consulting or involving the latter. • The companion does this, since (s)he believes knowing the patient well enough • The focus is on biomedical issues, no other type of information (e.g., cultural elements) is added. • If the companion adds information that is not solicited by the clinician, that part of the conversation is coded as *Close informant*.

Source: Adapted from Leanza [30] and expanded

[a] See e.g. Cox et al. [9]

[b] For a more detailed explanation of what it implies for an interpreter to be seen as "active", see Leanza [30]

The communication patterns were coded following Barry et al. [3] and Leanza et al. [31]. In the first step, each speech utterance was coded based on whether it conveyed the voice of the Lifeworld (LW) or the voice of medicine (VoM) (see Table 3 for coding criteria). In the second step, instances in which the LW emerges are evaluated with respect to how it is managed, notably through interruption or through acknowledgment and/or inclusion (see Fig. 1 for the classification tree). The latter requires meaning creation based on information extracted from the LW [31]. In instances where the LW is absent, communication patterns are classified as *Strictly medicine*.

Table 3 Codification of the voice of medicine and the voice of the Lifeworld

Voice of medicine	Voice of the Lifeworld
• Use of specialized language (jargon)	• Use of common, popular language
• Requests or interventions focused on specific facts or symptoms, if possible measured and quantified	• Requests or interventions referring to contextualized facts, historically situated, accompanied by affective comments, somehow integrated into a set of meanings that goes beyond the usual medical framework
• Requests or interventions that exclude family, social, cultural, or emotional elements	• Patient's or companion's assumptions, judgments, emotions (fear, worries, etc.)

Source: Adapted from Leanza et al. [31]

The coding procedures were applied consistently to the PCs' speech turns in all nine audio-recorded consultations. In the first stage, coding was done by two independent coders in an iterative process of comparison and discussion overseen by the last author. Following the completion of the coding for all nine cases, the second author verified the coding under the last author's supervision. These different steps were taken to resolve any discrepancies in coding through consensus and to establish an appropriate coding framework tailored to the study context, given that the original coding frameworks were drawn from a different study context (pediatrics in the case of Leanza [30], family medicine in the case of Leanza et al. [31, 32]).

To obtain a picture of the roles and patterns of communication in this corpus, a frequency analysis was conducted. The interaction between PC roles and Lifeworld management was explored through a dependency analysis. Only the PCs' speech turns were included. A chi-square test ($\chi 2$) was used to ascertain whether the PC roles and communication patterns behaved as independent or dependent variables [38]. A significant $\chi 2$ would suggest an association between a specific role and a particular communication pattern. For this analysis, roles were grouped into broader categories, notably stances: Linguistic agent, Lifeworld agent, System agent, and Principal. Communication patterns were grouped into three categories (Strictly medicine, Lifeworld heard/included, or Lifeworld interrupted). The analysis was performed using SPSS 26 (Statistical Package for the Social Sciences) and Excel software.

Cramer's V was calculated to determine the strength of the relationship between the variables. Adjusted standardized residuals were computed to establish the significance level of deviations from expected values for each cell [1]. Positive standardized residuals indicate that the observed frequency is higher than expected, suggesting a positive association between variables. Negative values indicate that the observed frequency is lower than expected, suggesting a negative association between

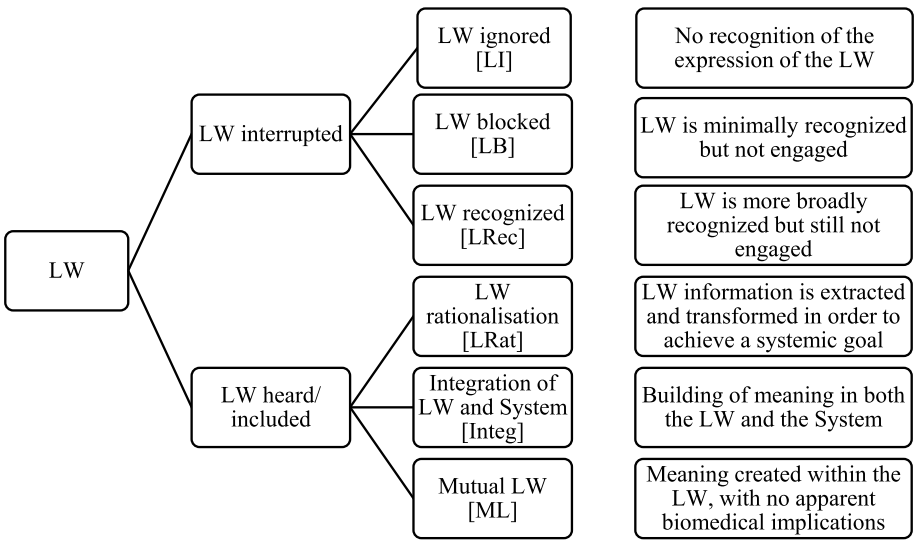

Fig. 1 Codification of communication patterns. Note: The classification presents an elaboration of a classification previously proposed by Leanza et al. [31], following Barry et al. [3], Leanza [30] and Leanza et al. [32]

variables. The contribution of each cell to the total $\chi 2$ was also calculated. These calculations helped to identify the primary significant contributions to the $\chi 2$, defined as cells with a significant adjusted residual and an above-average contribution, as recommended by Rakotomalala [38].

Qualitative analysis

A linguistic-ethnographic analysis of excerpts from the same encounters was carried out. Linguistic ethnography provides an interpretive perspective on the local and immediate actions of actors, considering their viewpoints and examining how these interactions are embedded within broader social contexts and structures [13]. This approach entails observing, questioning, recording, reflecting, comparing, and reporting in a disciplined manner [25]. Roles and Lifeworld dynamics are analyzed through a language and social interaction lens [11], drawing on transcripts from the interaction, complemented with field notes from ethnographic observations and post-consultation interviews with clinicians, and applying common triangulation techniques [17]. The analysis incorporates theoretical insights from discourse analysis, interactional sociolinguistics, interpreting studies, L2 research, social psychology, and seminal work by Gumperz [23], Goffman [21], and Hymes [25].

Excerpts are selected to serve as "apt" illustrations regarding the research questions at hand [20] based on their capacity to demonstrate similar types of interactional complexities, repair mechanisms, and accommodations encountered throughout the entire consultation in question as well as other consultations exhibiting comparable contextual features related to language proficiency, role dynamics, and communication.

Quantitative analysis

In the nine transcripts of the consultations, 850 PC utterances or speech turns were identified. For the coding of PC roles, out of the 850 utterances, 22% ($n=185$) were deemed impossible to code or irrelevant because they were either incomprehensible or directed toward the researcher/observer and were therefore excluded. The coding analysis thus draws on the 665 remaining utterances that could be coded for companion roles.

Companion roles

The coding of PC roles showed that the Linguistic agent stance dominated, being observed in nearly 40% ($n=263$) of the coded utterances. It was followed by the Principal stance, in which the PC answers for the patient without involving the latter. This stance was observed for 37% ($n=247$) of the coded utterances. Lifeworld and System agent stances each accounted for just over 11% of the utterances. Table 4 presents the frequencies of role occurrences by case.

Within the linguistic agent stance, the Interpreter role was adopted most frequently by the companion, representing almost 88% ($n=231$) of the category. Within the Lifeworld agent stance, the Close informant role accounted for 92% ($n=72$) of utterances, with the Mediator and Advocate roles accounting for only 4% each ($n=3$). The Cultural informant role was not observed at all. Within the System agent stance, the Monolingual professional prevailed at 84% ($n=65$), while the Bilingual professional role occurred less frequently at 16% ($n=12$).

Hence, the analysis suggests that, like trained interpreters (see [30]), PCs primarily act as linguistic agents. At the same time, in line with previous research [41], family

Table 4 Frequency distribution of stances and roles by case

Stances	Roles	Case ID									N	% all turns	% coded turns
		1	2	3	4	5	6	7	8	9			
		Nr of utterances by category											
Linguistic agent	Interpreter	22	82	46	36	1	6	17	4	17	231	**27.2**	**39.5**
	Active interpreter	2		8	1		3			18	32	**3.8**	
Lifeworld agent	Cultural informant										0	**0.0**	**11.7**
	Mediator		3								3	**0.4**	
	Advocate		1	2							3	**0.4**	
	Close informant	16	23	1	4	8	2	6	1	11	72	**8.5**	
System agent	Bilingual professional		3	2	2			5			12	**1.4**	**11.6**
	Monolingual professional	13	20	5	4	4	4	9	1	5	65	**7.6**	
Principal	Answers for patient	34	57	27	7	19	1	33	5	64	247	**29.1**	**37.1**
N/A		18	38	30	22	12	3	7	6	49	185	**21.8**	-
	Total	**105**	**227**	**121**	**76**	**44**	**19**	**77**	**17**	**164**	**850**	**100.0**	**100.0**

N/A Excluded from the analysis for being incomprehensible or reflecting interaction with the observer

Table 5 Frequency distribution of communication patterns by case

	Case ID									N	% all turns	% coded turns
	1	2	3	4	5	6	7	8	9			
	Nr of utterances by category											
Strictly medicine	55	167	89	46	30	16	48	4	97	552	**64.9**	**70.2**
LW interrupted	*7*	*42*	*2*	*14*	*3*	*0*	*8*	*0*	*12*	*88*		
LI	3	35		10	2		4		4	58	**6.8**	**11.2**
LB	4	6		4			2		3	19	**2.1**	
LRec		1	2		1		2		5	11	**1.3**	
LW heard/included	*30*	*11*	*13*	*5*	*9*	*3*	*18*	*12*	*41*	*142*		**18.1**
LRat	1	2		4	2	1	2	6	10	28	**3.2**	
Integ	9		1	1			13		1	25	**2.9**	
ML	20	9	12		7	2	3	6	30	89	**10.5**	
N/A	13	7	17	11	2		3	1	14	68	**8.0**	-
Total	**105**	**227**	**121**	**76**	**44**	**19**	**77**	**17**	**164**	**850**	**100.0**	**100.0**

For pattern codes, see Fig. 1; N/A: Excluded from the analysis for being incomprehensible or reflecting interaction with the observer

interpreters speak more often than trained interpreters on behalf of patients instead of accurately translating patients' words to healthcare providers and vice versa. Indeed, the second most prevalent role/stance for PCs is that of Principal, where the PC speaks for the patient, mostly without involving the latter. Together, the Principal stance and the Close informant role (which involves spontaneously providing information without consulting the patient) account for nearly half (48%) of PCs' utterances.

This significant proportion of interactions excluding patients raises concerns. For instance, in Cases 5 and 9, PCs speak on behalf of patients, without consulting them, in more than 50% of the turns that were codifiable. Although contextual information on patients' emotional or physical states can be valuable for physicians, especially if PCs are well informed [41], having companions answer on behalf of patients to a major extent risks relegating the latter to disempowered, passive bystanders. This aligns with Inghilleri [26]'s findings that allowing for an expanded role of interpreters empowers the interpreter, but not necessarily the interlocutors. As the companion's perception of the patient's situation may be partial and/or biased, the exclusion of the patient may lead to the transmission of incorrect information, with potential negative consequences such as increased medical errors, reduced patient satisfaction, or decreased treatment adherence [18]. It also hampers the process of trust-building between the doctor and the patient, possibly increasing patient anxiety, and more broadly jeopardizes clinicians' professional integrity.

The roles of Mediator and Advocate are seldom used, and the role of Cultural informant is never used. This finding aligns with Leanza's [30] research on pediatric consultations. Those roles that do not support the system's goals or challenge the physician's intervention strategy are likely to be discouraged or disallowed.

Communication patterns

For the coding of communication patterns about Lifeworld management, 8% ($n=68$) of the utterances were not coded, as they were incomprehensible or directed toward the researcher/observer.[5] This part of the coding analysis thus draws on the 786 remaining utterances that could be coded. Table 5 displays the frequency distribution of communication patterns across the nine cases.

'Strictly medicine' patterns accounted for 65% ($n=552$) of utterances. The voice of the Lifeworld emerged in 29% ($n=230$) of utterances concerning each of the nine considered consultations. The balance between 'Strictly medicine' and utterances involving the Lifeworld varied across consultations, ranging from 24% to 84% for 'Strictly medicine'. In most cases where the Lifeworld emerged (62%, $n=142$), it was acknowledged and/or included in some way. This was observed in all consultations to some extent. Most frequently, it led to a short conversation where the Lifeworld was discussed in its own right ('Mutual LW'), which can, for instance, contribute to relationship building between the clinician and the patient (see also [31]).

In 38% ($n=88$) of the cases where the Lifeworld emerged, it was interrupted, in most cases by being simply ignored. Clinicians were responsible for 75%

[5] For a number of speech turns, coding was difficult in terms of identifying the interpreter role, but the communication pattern could be established based on the previous and following speech turns.

of the interruptions, and PCs were responsible for the remaining 25%. Patients never interrupted Lifeworld conversations. When PCs interrupted Lifeworld interventions, they invariably (in all cases) ignored them ("LW ignored"), which could also reflect a lack of attention. Clinicians used more varied strategies to interrupt Lifeworld interventions. Even if they fully ignored LW interventions in more than half of the cases of interruption, in the other cases of interruption, they showed some form of recognition ("LW blocked" or "LW recognized"), indicating more clearly that the interruption was strategic.

In 28 speech turns (3.6%), Lifeworld interventions were strategically transformed to extract useful information for systemic goals (e.g., differential diagnosis) ("LW rationalization"). In 25 utterances (3.2%), Lifeworld interventions were taken as an opportunity to build meaning in both the Lifeworld and the medical world, e.g., by adapting medical advice to a patient's personal context ("Integration of LW and System") [31].

In most consultations (in more than two-thirds of cases where the LW emerged), Lifeworld interventions were heard and included. Two consultations (Case IDs 2 and 4) involved consistent interruptions of the Lifeworld (75–80% of LW interventions). These were both consultations where the PC was more likely (than on average across the considered consultations) to take up the role of (passive) interpreter. This raises the issue of whether there is a relationship between the role taken up by PCs and the way Lifeworld issues are managed in the consultation. To formally identify such a possible association, a dependency analysis was carried out between the distribution of PC roles and the adopted Lifeworld management strategies.

Hence, regarding communication patterns, consultations predominantly employ a biomedical register, consistent with the emergency department's objective to treat acute medical problems [29]. When Lifeworld elements are introduced, they are mostly included in the conversation. However, four out of nine observed consultations exhibited high rates of Lifeworld interruption. Physicians primarily caused these interruptions, but companions also contributed. Ignoring Lifeworld elements constitutes a symbolically violent interruption.

Two concerns are worth highlighting in this context. First, even if interruptions are concentrated in a few consultations, they pose risks to establishing trust between patients and physicians and developing accurate diagnoses and appropriate treatments. Second, physicians may perceive interrupting Lifeworld elements as appropriate communication. However, exploring the Lifeworld with the patient can also provide important contextual information [3, 22]. In 25% of cases, companions in consultations have been observed to not transmit Lifeworld elements, a phenomenon also observed with family interpreters during family medicine consultations [32].

Roles and communication pattern interactions

A chi-square analysis was carried out on a total of 660 speech turns that had been coded both in terms of roles (aggregated to the level of stances) and in terms of communication patterns (also aggregated in three broad groups). The chi-square test yielded a significant result: $\chi 2\ (6, N = 660) = 105.71$, $p < 0.001$, leading to the rejection of the null hypothesis. This outcome suggests that there is indeed a dependency relationship between the stances adopted by companions and the observed communication patterns. Nonetheless, the Cramer's V value of 0.283 points indicated a weak association between these variables. Table 6 illustrates the observed (N) and expected values in the case of variable independence (Expected N), cell-specific $\chi 2$ values, each cell's contribution to the total $\chi 2$ (%) and adjusted standardized residuals (Adj. Res.). The mean contribution of a cell to the $\chi 2$ was 8.3%.

When the PC assumed the role of linguistic agent or of principal, this led more frequently than expected in the case of variable independence to a focus on purely medical issues. Conversely, when the PC took the role of Lifeworld or System agent, this led more often than expected to the emergence of Lifeworld issues.

The strength of each cell's contribution to $\chi 2$ depends on the gap between the observed occurrence of a pairwise combination of a PC role and a communication pattern and the expected occurrence if they were independently distributed. It provides an indication of which pairwise associations are most indicative of a dependent relationship. Overall, the System agent perspective contributed the most to $\chi 2$ (50.2% of the total).

There was a negative association between the System agent stance and the Strictly medicine communication pattern (1.6 times the average contribution), suggesting that if the companion takes up the role of System agent, the conversation is less likely to focus on medical issues alone, despite the System agent being defined as a role where the PC acts as a representative of the healthcare system.

Similarly, a positive association could be seen between the System agent stance and communication patterns where the Lifeworld emerged (irrespective of whether they were interrupted or acknowledged/included). Lifeworld interrupted patterns contributed strongly to $\chi 2$ (54.5% of the total), with a positive association with the System agent stance (2.4 times the average) as well as the Lifeworld agent stance (2.7 times the average).

Thus, PCs who act as System agents seem to succeed more often in bringing Lifeworld issues to the fore and achieving their acknowledgment in medical interactions

Table 6 Relationships between companion stances and communication patterns

Communication patterns		Stances			
		Linguistic Agent	Lifeworld Agent	System agent	Principal
Strictly medicine	N	214	40	28	200
	Expected N	188.4	57	56.2	180.4
	$X>^2$	3.5	5.1	14.2	2.1
	%	3.3	4.8	13.4[b]	2.0
	Adj.res.	4.6[a]	−4.6[a]	−7.7[a]	3.6[a]
LW interrupted	N	16	23	22	13
	Expected N	28.9	8.7	8.6	27.7
	X^2	5.8	23.2	20.7	7.8
	%	5.5	22.0[b]	19.6[b]	7.4
	Adj. res.	−3.3[a]	5.5[a]	5.1[a]	−3.8[a]
LW heard/included	N	28	15	27	34
	Expected N	40.7	12.3	12.1	38.9
	X^2	3.9	0.6	18.2	0.6
	%	3.7	0.6	17.2[b]	0.6
	Adj. res.	−2.8[a]	0.9	4.9[a]	−1.1

LW Lifeworld; [a]significant adjusted standardized residuals (]−1.96, 1.96]); [b]contribution to X^2 higher than average

than PCs who act as Lifeworld agents. It could be that taking up the role of agent of the medical system allows the companion to establish a stronger link between the patient's personal experience and his/her medical condition. Linguistic agent and Principal stances contributed less than average to $\chi 2$ in their interaction with communication patterns. The remaining communication patterns shared percentages almost equally, with no notable contributions beyond those mentioned.

Qualitative analysis

The consultation with Case ID 7 was selected as the basis for an illustrative linguistic-ethnographic case study, as it presents (at par with Case ID 9) the broadest variety of PC roles and communication patterns.

Like the other consultations considered in the analysis, the consultation with Case ID 7 was recorded in an inner-city emergency department in Brussels. It took place on a Friday evening after 8 pm, outside usual office hours, when standard entrance triage procedures are not being conducted. It concerned a medical interaction involving five participants. An elderly Moroccan man (PAT) of 74 years' old presented to the Emergency Department with ambulatory difficulties due to swelling of the limbs. His limited proficiency in French required him to rely heavily on language intermediation by his two sons-in-law (COM1 and COM2) for communication. The man is seen by a male internist who is fluent in French (DOC). The researcher/observer was also present at the consultation.

The interaction primarily transpired between the physician and the translating family members, with occasional input from the patient to validate or endorse the conveyed information. The physician suspected gout as a potential diagnosis, and the discussion centered around this medical concern. The patient intermittently participated to confirm or agree with information being discussed. The conversation took place during history taking, in which the physician inquires into the patient's symptoms. The language barrier complicated the interaction. Both sons-in-law attempted simultaneous translations, resulting in confusion and additional pressure on the physician. One son-in-law also frequently responded directly to inquiries without involving the patient.

Excerpt 1, which is taken from the start of the consultation, illustrates how COM1 indeed spoke for the patient without involving him. This part of the consultation aimed to gather information on the symptoms (location, timing, etc.). The focus was fully on medical issues (symptoms): it is an example of the *Strictly medicine* communication pattern where the Lifeworld does not emerge. As soon as the physician opened the conversation with a first question, the COM1 voluntarily provided information, acting as a principal. The clinician accepted COM1's input, rather than undertaking efforts to clarify what the exact relation was of the PC to the patient, and/or engaging in more elaborate role negotiation to ensure he took up the role of interpreter. This suggests the clinician assumed COM1 to be a sufficiently reliable source of information without verifying it and took a pragmatic approach to gathering information in the time constrained ED context. It however created an important risk of receiving incorrect information.

Excerpt 1: The PC speaks on behalf of the patient

1	DOC	Ça va ? (.) Donc, c'est votre docteur qui vous envoie, ... <0,5> ... c'est ça? ... <0,5> …	Are you ok ? (.) So, it is your doctor who has sent you, correct?
2	COM1	= = Oui, si j'ai bien compris	Yes, if I have understood it correctly.
3	DOC	= = D'accord, il y a ma collègue qui m'a raconté qu'il a des gonflements au niveau des jambes et des articulations ^	Ok, my colleague told me that he has swellings at the level of his legs and his joints
4	COM1	°Il y a sa main en faite° ... <0,5> …	There's his hand actually.
5	DOC	Ses mains aussi?	His hands as well?
6	COM1	= = Non^, pas les deux, juste la droite	No, not both of them, only the right one.
7	DOC	= =Juste la droite. Et ça fait combien de temps ça?	Only the right one. And how long has it been this way?
8	COM1	= = Eu: : hm bon depuis dimanche	Euhm… well, since Sunday.
9	COM1	Mai: :s plus exactement, ça fait déjà quatre mois depuis que ça commence et ça part mais ses derniers temps ça a vraiment commencé à gonfler	But to be more precise, already for the last four months it has come and gone but lately it has really started to swell.
10	DOC	(0.3) Et dimanche le plus?	And mostly so on Sunday?
11	COM1	Depuis dimanche ça a commencé petit à petit (.) mais depuis hier ça a gonflé vraiment fort	Since Sunday, it has started little by little, but yesterday, it has really swollen a lot.

In the same excerpt, COM1 can also be seen to take up at some point the role of Close informant (line 9), when he starts volunteering contextual information about the patient's condition ("lately it has really started to swell").

The patient remained an unaddressed hearer in the participation framework and de facto excluded from the process of co-constructing an understanding of his own condition, due to the language barrier. No one undertook an attempt to change that, suggesting that everyone was either comfortable with the situation or did not feel it was in their power to change it. It seemed that both the patient and the physician trusted the PC, at least to provide this first round of information.

The clinician's approach changed in Excerpt 2, where he tried to inquire about the patient's pain experience. When prompted at first, COM1 again started to volunteer information. However, conscious of the fact that pain is a very subjective experience and that it is necessary to receive a first-hand account of it, the physician explicitly asked COM1 to take up the role of interpreter and convey the question to the patient.

Excerpt 2: The physician attempts to renegotiate the PC's role

12	DOC	Ça fait très mal? / ... <1> ...	Does it hurt a lot?
13	COM1	Oui oui, franchement... ((speaks on the phone))... / ... <3> ...	Yes, yes, frankly…
14	DOC	Vous voulez lui demander si ça fait mal ? / ... <1.5> ...	Can you ask him if it hurts?
15	PAT	((groans)) / ... <2> ...	
16	COM1	((speaks in Arabic)) ... <4> ...	You're in pain, aren't you? A lot of pain?
17	COM2	((speaks in Arabic)) ... <1> ...	Yes, a lot of pain. A lot, a lot.
18	COM1	Oui, oui/ /	Yes, yes
19	DOC	Et ça fait mal surtout aux jambes ?	And does it hurt in particular at the level of his legs?
20	COM1	Les jambes	The legs

The patient emitted an audible groan. COM1 then took up the role of interpreter, accurately translating the clinician's question into Moroccan Arabic. This type of role negotiation was rarely observed in the broader corpus on multiparty interactions in the Emergency Department. Indeed, an earlier related study by Cox et al. [12] revealed that clinicians seldom explicitly assign a specific role (such as an interpreter) to a PC. Nevertheless, the patient did not reply; instead, COM2 took the floor and replied affirmatively in Arabic, revealing himself as a close informant as well. His message was subsequently translated to French by COM1, who thus acted as an interpreter. However, the translation did not convey the same sense of gravity of the pain: it confirmed that the patient was in pain but not that he was in a lot of pain. In combination with the patient's groaning, the physician inferred significant pain. However, due to the absence of direct interaction with the patient, there was a risk of missing crucial data.

The instance where COM2 spoke on behalf of the patient without waiting for his reply and where COM1 provided an incomplete translation could be interpreted as an instance were the patient's Lifeworld briefly emerged but was subsequently ignored as a result of the insufficient effort taken to give space to the patient's own experiences. Indeed, the patient was not given the floor despite the clinician's efforts in turns 12 and 14 and COM1's efforts to translate the clinician's question to the

patient in turn 13. While the clinician and COM1 made explicit efforts to bring in the patient's perspective—the first by renegotiating the participation framework, the latter by taking up the role of interpreter as requested—the patient appeared to remain silent. Hence, this observation underscores the importance of the patient's ability, agency and engagement in pushing for the inclusion of his Lifeworld and shaping patient-centered consultations.

In Excerpt 3, the history taking process had been going on for a while and the physician had adopted the candidate diagnosis of gout, a type of inflammatory arthritis. He then addressed COM1 directly, asking whether he was aware that his father-in-law was suffering from gout ("Did you know?"). COM1 confirmed this immediately, answering on the patient's behalf as a principal. He then spontaneously expressed the voice of the Lifeworld (line 62): as a close informant, he indicated that the patient's brother and father have had the same problem. The clinician embraced this piece of information without hesitation as if it came directly from the patient, concluded that the issue must then run in the family, and proceeded with the physical examination of the patient. As such, relevant information was extracted from the voice of the Lifeworld and used to support the diagnostic process, in line with what is referred to in our framework as the"rationalization" of the Lifeworld.

Excerpt 3: Lifeworld rationalization

60	DOC	Et là aussi? Ah oui, ça c'est classique./ / ... <2> ... Mais monsieur il a la goutte en fait. / ... <2> ... Vous saviez ça / ... <1> ... Ça, c'est connu? // ... <2> ... Il a déjà eu ça?	And there as well? Oh yes, that's common. But sir has gout actually. Did you know? Was it known? Has he already had that?
61	COM1	Oui, il a déjà eu ça / ... <5> ...	Yes, he has already had that.
62	COM1	Aussi chez le frère et le papa / ... <1> ...	Also with the brother and the father
63	DOC	Ah oui, c'est familial alors // ... <1> ...	Oh yes, then it runs in the family.
64	DOC	Ok, ça va. // ... <3> ... Je vais regarder le ventre /	Ok, that's fine. I am going to have a look at the stomach.

Finally, in Excerpt 4, the clinician performed a physical examination of the patient's stomach. This stage of the medical consultation created a direct physical link between the clinician and the patient, as the clinician touched the patient and looked at his face to identify nonverbal signs of pain. As the physician touched the patient's stomach, he asked whether it hurted. The subsequent reaction ("Ok, super") suggested that the patient had shaken his head. COM1 at the same time took up the role of bilingual professional, encouraging the patient in Arabic to speak up when in pain. When the clinician asked the patient to sit up and asked whether he was in pain, the latter replied "No", showing more engagement than in any of the previous excerpts. In other words, in this excerpt, the patient plays a more active role, encouraged by an explicit nudge from COM1 and the possibility to rely on body language in communicating with the physician. We therefore consider the Lifeworld as being recognized in this excerpt.

Excerpt 4: Co-construction of participant roles

73	DOC	Tu as mal? ... <2> ... Ok, super	Does it hurt? Ok, super
74	COM1	((speaks in Arabic))	If it hurts somewhere, you need to speak up…
75	COM1	J'ai dit 'si: : tu as mal, il faut dire'	I said 'If it hurts, you need to speak up'
76	DOC	= =Oui oui ((pauses))	Yes yes
77	COM1	((sighs)) ... <25> ... ((DOC performs physical examination))	
78	DOC	Vous pouvez vous asseoir? ... <1> ... Ça fait mal?	Can you sit ? Does it hurt?
79	PAT	= =Non	No

The excerpts illustrate how the PC's role is co-constructed by the participants in the interaction. In some situations, this can lead to patients remaining largely excluded from the conversation. However, clinicians have leverage over role dynamics through the way they prompt their questions and by actively engaging in role renegotiation. PCs can shift between different roles upon their own initiative, and patients can influence the situation as well by modulating their level (or lack thereof) of proactive engagement.

The case study also demonstrates the swift role changes that PCs undergo during interactions, reminding of Inghilleri [26]'s work on interpreter agency. She describes the interpreter profession as a "zone of uncertainty", that allows interpreters to actively shape, and even sometimes dominate, the participant framework of the social/interactional space in which they exercise their profession, in constant negotiation with the other participants in the interaction. The situation showcases interactional complexity and how roles and communication patterns are interconnected within a complex system involving body language and subject-matter discussions.

In the excerpts above, the voice of the Lifeworld seems to emerge only occasionally and to be managed in a rather indeliberate way. When deemed relevant, it is taken on board in the medical diagnostic process, though not always completely, sometimes due to omissions in interpretation.

Efforts by the physician to address the patient directly through translations by family members proved difficult, involving multiple participants speaking different languages, playing different roles and having varying language skills levels. After the interaction, the concerned physician described the situation with multiple PCs as being considerably confusing due to the frequent simultaneous speech and the lack of clarity on whether PCs were correctly describing the patient's perspective when speaking on this behalf. The confusion added stress and cognitive overload as the physician attended to the patient while conducting the clinical reasoning process (see Excerpt 5 and Excerpt 6).

Excerpt 5: After-action interview with physician after first part of the consultation

Researcher: Er, how was the consultation?

DOC: (.) It was crowded. It was very crowded. (.) So there were, (.) so you see, (.) the patient did not speak French. (.) There were two, (.) two sons apparently but who translated in addition simultaneously. (.) So it was quite painful. (.)

Researcher: So there was one person next to you and the others were sitting on the table.

DOC: Exactly. (.) Yeah. The two were sitting around the table. There was one who was behind me who came after. (.) Right after. (.) And so when I asked a question, (.) there was one who started translating, (.) the other started translating too. So I think that could be confusing. (.) Uh and then there was also one of the sons who answered right away. (.) That's it actually, (.) there was one of the sons who answered right away when I asked him a question, he answered instead of the father and then the other one started translating at the same time. (.) So it was quite confusing.

Text presents translation from original transcription in French to English

In contrast, the physician reported a significantly improved experience during the last part of the consultation, when only one family member assisted at the interaction. The physician described communication during that part of the consultation as "very well" and "clear". The physician noted that having a single interpreter throughout the consultation would have been easier to manage, eased the pressure on the communication process, reduced cognitive load, and facilitated a smoother clinical reasoning process.

Excerpt 6: After-action interview with physician after second part of the consultation

Researcher: how did the communication go?

DOC: Well very well it was clear. (.) I think the family understood, (.) the patient understood and the patient was quite open and accepted the hospitalisation. (.) So I think it went very well. (.) they were fewer in number because it's the same person as recording one so he had less less people. (.)

Researcher: Did that help you or? DOC: Yes indeed you already feel when there are already fewer people, there is less pressure. (.) Well, actually, I should have done it during the first visit afterwards, normally I do that. Now that only one person is there, you see, (.) it makes things much easier.

Text presents translation from original transcription in French to English

Conclusion and implications for research and practice

This study presents and documents the different roles assumed by PCs in companion-mediated multilingual medical interactions and the communication patterns that arise. It also explores, through dependency analysis, possible patterns of association between PC roles and communication patterns. The linguistic ethnographic approach illustrates the contextual and interactional context in which these roles and patterns take shape.

Our results illustrate the varied range of roles PCs can take up during a medical interaction. In contrast with studies on monolingual triadic medical interactions, research on multilingual medical interactions have so far paid limited attention to PC roles beyond the role of interpreter, such as the role of advocate, close informant and so on, which can bring value to the consultation in many ways, including by providing relevant information on the patient, clarifying misunderstandings, and so on. On the other hand, several of these roles may encourage PCs to speak on behalf of patients. Especially in multilingual interactions, such interactional dynamics carry a higher risk of causing misunderstandings, as patients may not understand bilateral conversations between their PC and the doctor, and doctors may not understand conversations between patients and their PCs due to a language barrier, hampering patient centricity and shared decision-making.

Our findings also indicate that in our data, over 40% of Lifeworld occurrences are inadequately addressed, primarily due to physician interruptions to refocus the conversation back on the world of medicine. Even when PCs take on an active stance, such as Linguistic agent, System

agent, or Lifeworld agent, Lifeworld interruptions are frequently observed. The Lifeworld is best acknowledged when brought up by a System agent, who may have the comparative advantage that (s)he can link the Lifeworld directly to medical issues and, as such, encourage its integration.

Future research should explore whether this propensity to interrupt the Lifeworld is justified in emergency settings and examine the causes and consequences of these disruptions. As cognitive strain can impede effective communication during ED consultations, adopting patient-centered approaches adapted to ED communicative ecology is essential [29]. It would be interesting to explore whether the results of the study carry over to other medical contexts, especially those with lower time pressure. Furthermore, future work could consider whether interpreter roles vary according to the different communicative events that take place during the consultation (history taking, physical examination, treatment negotiation and closing), as earlier research has pinpointed that communicative resources and patient-doctor power asymmetries vary along these different stages of the consultation (Robinson, 2003) [7].

This study aims to contribute to strengthened awareness among clinicians of their communicative behavior during consultations, the impact of small communicative events on the diagnostic process, and how they can leverage PCs' contributions to make the communication process more effective. Awareness can be built by incorporating ethnographically informed research into clinical training and policy development [11].

Practical implications include the need for clinicians to be better informed about working with companions and receiving specific training in this area. A key element to improve work with PCs is to clarify the companion's relationship with the patient. In the consultations studied in this paper, only one physician inquired about the relationship between the patient and companion and the reason for their presence. Clinicians often presume that companions are family members to circumvent intrusive questions and maintain privacy. However, this approach may adversely affect care quality, as the companion-patient relationship can influence the companion's role as a valid medical history source. Moreover, the emotional and cognitive impacts on the companion of information disclosed during a medical consultation may differ based on whether they are a family member, neighbor, friend or another person. As suggested by Diamond [14], clinician hesitancy to inquire about the companion's relationship with the patient could be alleviated through the use of the phrase 'who did you bring today?'.

To avoid misalignment in expectations, clinicians should be encouraged to engage in role negotiation with companions, especially as the latter may not see themselves as interpreters and lack relevant training, potentially leading to role confusion [12, 41]. Ethnographic observations revealed that clinicians were often frustrated when companions answered questions on behalf of the patient rather than relaying questions, however, they did not explicitly ask the companion to relay these questions during consultations. The quality and credibility of information provided by companions should be evaluated during consultations, and clinicians should insist on accurate translation when necessary.

Finally, clinicians should be aware that relying on PCs for translation, particularly in high-stakes situations, can compromise their professional integrity by undermining the accuracy of the consultation and the quality of patient care. If relying on trained interpreters is not feasible due to healthcare system constraints, clear procedures should be established regarding information gathering from and instructions for companions. At any rate, the use of trained interpreters should be encouraged to ensure that foreign-language-speaking patients are brought as much as possible onto an equal footing with other patients. Indeed, trained interpreters reduce confidentiality breaches, support the integration of Lifeworld elements [31] and facilitate communication tasks in general [40] in comparison with situations mediated by family interpreters or no interpreters at all. As Skaaden [44] argues, the professionalization of interpreters is crucial in maintaining the integrity of medical consultations. The findings of this study underscore the risks when this professionalization is absent.

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Authors' contributions
AC collected and prepared the data for analysis, carried out the qualitative analysis, provided input for the quantative analysis, and led on the drafting of the paper. YL coordinated the quantative analysis, provided input for the qualitative analysis, and contributed to the drafting of the paper. MCL performed the quantitative analysis and contributed to the drafting of the paper. ND contributed to the data collection and the drafting of the paper. All authors reviewed the manuscript.

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Data availability
Data used for the analysis in the paper consist of transcripts of audiorecorded medical consultations. For reasons related to privacy and confidentiality, ethical restrictions prevent us from making them publicly available.

Declarations

Ethics approval and consent to participate
Ethics approval for data collection was obtained as per the requirements of the hospital ethics board of the hospital under study (Comité Local d'Ethique Hospitalier – O.M. 007; Centre Hospitalier Universitaire CHU Saint-Pierre, Rue Haute 322, 1000 Bruxelles; approval number AK/12-10-81/4181). An oral informed consent procedure was designed in compliance with the World Medical Association Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects. Especially for this research project an oral informed consent system was created that consisted of pre-recorded spoken explanations on the consent procedure in different languages which were played to the patient and companion.

Competing interests
The authors declare no competing interests.

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References

1. Agresti A. Categorical Data Analysis. John Wiley & Sons; 2012.
2. Aronsson K, Rundström, B. Child discourse and parental control in pediatric consultations. Text - Interdiscip. J Study Discourse. 1988:8. https://doi.org/10.1515/text.1.1988.8.3.159.
3. Barry CA, Stevenson FA, Britten N, Barber N, Bradley CP. Giving voice to the lifeworld. More humane, more effective medical care? A qualitative study of doctor–patient communication in general practice. Soc Sci Med. 2001;53:487–505.
4. Boivin I, Leanza Y, Rosenberg E. Conceptions des rôles des interprètes professionnels et familiaux dans les entretiens médicaux et postures par rapport au monde vécu. Alterstice - Rev Int Rech Intercult. 2013;2:35–46.
5. Cooper S, Stevenson F. Communicating decisions about care with patients and companions in emergency department consultations. Health Expect. 2022;25:1766–75. https://doi.org/10.1111/hex.13519.
6. Cornelius T, Moise N, Birk JL, Edmondson D, Chang BP. The presence of companions during emergency department evaluation and its impact on perceptions of clinician–patient communication. Emerg Med J. 2018;35:701–3. https://doi.org/10.1136/emermed-2018-207735.
7. Cox A. The dynamics of (mis) communication in language-discordant multi-party consultations in the emergency department. PhD, University Press, Vrije Universiteit Brussel. 2017.
8. Cox A. Venturing into interdisciplinary research as an applied linguist: challenges and opportunities. Bull Linguist Sci Lang. 2020;31:13–37.
9. Cox A, Kerremans K, Temmerman R. Niche sourcing and transexplanations for the enhancement of doctor-patient comprehension in multilingual hospital settings, in: Proceedings of the 10th International Conference on Terminology and Artificial Intelligence TIA 2013. 2013:33–36.
10. Cox A, Lázaro Gutiérrez R. Interpreting in the Emergency Department: how context matters for practice. In: Federici FM, editor. Mediating emergencies and conflicts. London: Palgrave Macmillan UK; 2016. p. 33–58.
11. Cox A, Li S. The medical consultation through the lenses of language and social interaction theory. Adv Health Sci Educ Theory Pract. 2020;25:241–57. https://doi.org/10.1007/s10459-018-09873-2.
12. Cox A, Rosenberg E, Thommeret-Carrière A, Huyghens L, Humblé P, Leanza Y. Using patient companions as interpreters in the Emergency Department: an interdisciplinary quantitative and qualitative assessment. Patient Educ Couns. 2019;102:1439–45. https://doi.org/10.1016/j.pec.2019.03.004.
13. Creese, A., Copland, F., 2015. Linguistic Ethnography, in: King, K., Lai, Y., May, S. (Eds.), Research Methods in Language and Education. Springer International Publishing, pp. 1–13.
14. Diamond, S., 2022. Personal communication at International Conference on Communication in Healthcare (ICCH) 2022, 5–9 September 2022, University of Glasgow, Scotland.
15. Divi C, Koss RG, Schmaltz SP, Loeb JM. Language proficiency and adverse events in US hospitals: a pilot study. Int J Qual Health Care. 2007;19:60–7.
16. Fioramonte A, Vásquez C. Multi-party talk in the medical encounter: Socio-pragmatic functions of family members' contributions in the treatment advice phase. J Pragmat. 2019;139:132–45. https://doi.org/10.1016/j.pragma.2018.11.001.
17. Flick U. Chapter four: triangulation in ethnography. In: Doing triangulation and mixed methods. SAGE Publications Ltd; 2018. p. 49–70. https://doi.org/10.4135/9781529716634.
18. Flores G, Abreu M, Barone CP, Bachur R, Lin H. Errors of medical interpretation and their potential clinical consequences: a comparison of professional versus Ad Hoc versus no interpreters. Ann Emerg Med. 2012;60:545–53. https://doi.org/10.1016/j.annemergmed.2012.01.025.
19. Gany F, Kapelusznik L, Prakash K, Gonzalez J, Orta LY, Tseng C, Changrani J. The impact of medical interpretation method on time and errors. J Gen Intern Med. 2007;22:319–23. https://doi.org/10.1007/s11606-007-0361-7.
20. Gluckman M. Ethnographic data in British Social Anthropology. Sociol Rev. 1961;9:5–17. https://doi.org/10.1111/j.1467-954X.1961.tb01082.x.
21. Goffman E. The Presentation of Self in Everyday Life. New-York: The Overlook Press; 1959.
22. Greenhalgh T, Robb N, Scambler G. Communicative and strategic action in interpreted consultations in primary health care: a Habermasian perspective. Soc Sci Med. 2006;63:1170–87.
23. Gumperz JJ. Discourse strategies. Cambridge University Press; 1982.
24. Habermas J. The theory of communicative action. Boston: Beacon; 1987.
25. Hymes DH. Language in education: ethnolinguistic essays, Language and ethnography series. Center for Applied Linguistics, Washington, D.C. 1980.
26. Inghilleri M. Mediating zones of uncertainty: interpreter agency, the interpreting habitus and political asylum adjudication. Translator. 2005;11(1):69–85.
27. Karliner LS, Auerbach A, Nápoles A, Schillinger D, Nickleach D, Pérez-Stable EJ. Language barriers and understanding of hospital discharge instructions. Med Care. 2012;50:283–9.
28. Karliner LS, Pérez-Stable EJ, Gildengorin G. The language divide. J Gen Intern Med. 2004;19:175–83 https://dx-doi-org.kuleuven.ezproxy.kuleuven.be/10.1111%2Fj.1525-1497.2004.30268.x.
29. Lachance, P.A., 2016. La communication à l'urgence ou l'urgence de la communication, in: Lussier, M.T., Richard, C. (Eds.), La Communication Professionnelle En Santé. Pearson, Montréal, pp. 617–642.
30. Leanza Y. Roles of community interpreters in pediatrics as seen by interpreters, physicians and researchers. Interpreting. 2005;7:167–92.
31. Leanza Y, Boivin I, Rosenberg E. The patient's Lifeworld: building meaningful clinical encounters between patients, physicians and interpreters. Commun Med. 2013;10:13–25.
32. Leanza Y, Boivin I, Rosenberg E. Interruptions and resistance: a comparison of medical consultations with family and trained interpreters. Soc Sci Med. 2010;70:1888–95. https://doi.org/10.1016/j.socscimed.2010.02.036.
33. Li S. Co-construction of interpreted conversation in medical consultations. Appl Linguist Rev. 2013;4:127–49. https://doi.org/10.1515/applirev-2013-0006.

34. Li S, Pearson D, Escott S. Language barriers within primary care consultations: an increasing challenge needing new solutions. Educ Prim Care. 2010;21:385–91.
35. Meeuwesen, L., Ani, E., 2011. "If you don't understand what I mean..." interpreting in health and social care. Centre for Social Policy and Intervention Studies, Utrecht.
36. Meyer B, Pawlack B, Ortun K. Family interpreters in hospitals: Good reasons for bad practice? mediAzioni. 2010;10: 297–324.
37. Mishler EG. The discourse of medicine: dialectics of medical interviews. Norwood: Ablex Publishing Corporation; 1984.
38. Rakotomalala R. Pratique de la régression logistique. Régression logistique binaire et polytomique, Université Lumière Lyon. 2011;2:258.
39. Ramirez D, Engel KG, Tang TS. Language interpreter utilization in the emergency department setting: a clinical review. J Health Care Poor Underserved. 2008;19:352–62. https://doi.org/10.1353/hpu.0.0019.
40. Rosenberg E, Leanza Y, Seller R. Doctor–patient communication in primary care with an interpreter: physician perceptions of professional and family interpreters. Patient Educ Couns. 2007;67:286–92.
41. Rosenberg E, Seller R, Leanza Y. Through interpreters' eyes: comparing roles of professional and family interpreters. Patient Educ Couns. 2008;70:87–93. https://doi.org/10.1016/j.pec.2007.09.015.
42. Schilling LM, Scatena L, Steiner JF, Albertson GA, Lin CT, Cyran L, Ware L, Anderson RJ. The third person in the room: frequency, role, and influence of companions during primary care medical encounters. J Fam Pract. 2002;51:685–90.
43. Schillinger D, Chen AH. Literacy and language disentangling measures of access, utilization, and quality. J Gen Intern Med. 2004;19:288–90.
44. Skaaden, H., 2023. Interpreter's mistake: Why should other professions care about the professionalization of interpreters?, in: Gavioli, L., Wadensjö, C. (Eds.) Routledge Handbook on Public Service Interpreting. London and New York: Routledge. pp. 261–276.
45. Stivers T. Negotiating who presents the problem: next speaker selection in pediatric encounters. J Commun. 2001;51:252–82. https://doi.org/10.1111/j.1460-2466.2001.tb02880.x.
46. Stoklosa H, Scannell M, Ma Z, Rosner B, Hughes A, Bohan JS. Do EPs change their clinical behavior in the hallway or when a companion is present? A cross-sectional survey. Emerg Med J EMJ. 2018;35:406–11. https://doi.org/10.1136/emermed-2017-207119.
47. Teddlie C, Tashakkori A. Foundations of mixed methods research: integrating quantitative and qualitative approaches in the social and behavioral sciences. London: Sage; 2009.
48. Wagley LK, Newton SE. Emergency nurses' use of psychosocial nursing interventions for management of ED patient fear and anxiety. J Emerg Nurs. 2010;36:415–9. https://doi.org/10.1016/j.jen.2009.07.022.

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