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Studying the diachronic dimension of specialised languages through an intentional approach to their social ontology

Étude de la dimension diachronique des langues de spécialité par une approche intentionnelle de leur ontologie sociale

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Abstract

Because specialised languages (SLs) stem from human activities, they exist in human time. Yet, their obvious diachronic dimension is rarely acknowledged, let alone explored. Mainstream approaches, notably English for Specific Purposes, deliberately focus on the present synchronicity of SLs to cater for the urgent needs of learners in the – apparently – most effective way. In contrast, the aim of this paper is to account for the diachronic dimension of SLs by showing that it is a central feature of their social ontology. It uses the theory of intentionality propounded by John Searle, an American philosopher, to establish that “specialisedness” and SLs result from “collective intentionality” as the underlying constructing factor of social reality (Searle 1995: 37–43). In that conceptual framework, the paper shows that specialised domains, communities and languages are basically “institutional” in nature as they follow Searle’s constitutive rule of social institutions: “X counts as Y in context C” (ibid.: 26). The paper analyses the various facets of the C variable of the rule and highlights its essential diachronic component. It identifies same-language specialised dictionaries and specialised encyclopaedic knowledge (inspired from Eco [1986: 68–86]) as effective tools to master the C contextual variable and interpret SLs correctly. The approach adopts a thoroughly holistic perspective since it is built on connections involving the mind, language, institutions, history and communities as key components of social ontology.

Key words

Specialised language; English for Specific Purposes; diachrony; institution; collective intentionality; specialised dictionary; specialised encyclopaedia

Mots clés

Langue de spécialité ; anglais de spécialité ; diachronie ; institution ; intentionnalité collective ; dictionnaire spécialisé ; encyclopédie spécialisée

Introduction

In his *Cours de linguistique générale* (1995 [1916]: chapter 3), Ferdinand de Saussure distinguished between the synchronic and diachronic approaches to linguistics. He famously opted for the former to propose his structuralist analysis of language. Saussure’s option left a lasting bias in favour of synchrony in many language studies and that bias can also be observed in English for Specific Purposes (ESP). For example, in *The Handbook of English for Specific Purposes* (Paltridge & Starfield 2013, hereafter *The Handbook*), a reference contribution to ESP studies, the index has no entries for synchrony and diachrony; the only entry devoted to history refers to that of ESP, not of language phenomena. The book defines ESP as “the teaching and learning of English as a second or foreign language where the goal of the learners is to use English in a particular domain” (ibid.: 2).

Since the goals of the learners are generally, if not always, present or near-future goals, synchrony is taken for granted and diachrony ignored.

In this paper, by contrast, my main objective is to introduce diachrony in the study of specialised languages (SLs) – e.g. medical English, legal German and Spanish for engineers. Although diachrony is only one of the facets in the nature of SLs, I believe it is a key epistemological dimension that determines whether SLs exist or not. As I see it, denying the diachronic dimension of SLs amounts to denying their enduring existence as language phenomena; conversely, acknowledging their diachronic dimension endows SLs with existence. Yet, stipulating that SLs have a diachronic dimension is not satisfactory enough. Diachrony has to stem logically from the epistemological account of their existence and I attempt here to outline a theory that may build an ontology of SLs that inherently includes their diachronic dimension. To fulfil this aim, I develop an “intentional approach to SLs” inspired from the philosophy of intentionality posited by John Searle, an American language and social thinker.

In a first section, I present my theoretical hypotheses and I distinguish them from the ESP position. The main thrust of the paper’s argument is that the intentional approach to SLs does not start from an analysis of language, but from the study of the mental states that generate language. In our research context, these mental phenomena are specialised intentional states that produce specialisedness. From the examination of individual intentional states, I then move on to collective ones which enable us to account for the social nature of specialisedness and of SLs. The second section examines how specialised collective intentionality generates SLs thanks to constitutive rules that create social reality. The institutional nature of specialisedness and of SLs is grounded in the central notion of context which contains diachrony as a key component. This section deepens the analysis of the several diachronic dimensions of SLs and clarifies the way diachrony is built into the process of interpretation of specialised messages. The third section presents two tools that may help learners and teachers to master the diachronic dimension of SLs: specialised dictionaries and specialised encyclopaedias. It shows how these tools fit into Searle’s intentional approach and apply his institutional constitutive rules. The discussion section puts the paper’s proposals into perspective by contrasting them with some ESP views, notably those expressed by Vijay K. Bhatia (2004). This section highlights the necessary primacy of mental phenomena over linguistic ones in the study of SLs. It also underlines the holistic dimension of the approach which positions all specialised phenomena within the infinite sphere of human institutional reality. The conclusion shows that the institutional character of specialised phenomena necessarily includes diachrony in their social ontology because context is one of the key components of the constitutive rules that bring them into existence.

1. ESP and the intentional approach to specialisedness

1.1. Diverging from the epistemological position of ESP

To clarify my theoretical proposal, I first have to contrast it with the epistemological premisses of ESP. ESP does not define itself as the study of language phenomena but as an approach to the teaching and learning of English suited to the needs of learners (Paltridge & Starfield *op. cit.*):

ESP is an approach to language teaching in which all decisions as to content and method are based on the learner’s reason for learning. (Hutchinson & Waters 1987: 19)

We believe that a theory of ESP could be outlined based on either the specific nature of the texts that learners require knowledge of, or on the basis of the needs-related nature of the teaching. (Dudley-Evans & St John 1998: 1)

In this approach, learners' needs are at the origin of what sort of language is to be taught. In other words, the specificity of English for medical or legal purposes does not stem from the domains of medicine or law, but from the requirement of learners. The logical consequence of this position is that these language contents only exist in teaching and learning situations, but not as independent language phenomena. Hutchinson and Waters thus conclude that there are no such things as Specialised Varieties of English (SVEs):

ESP is *not* a matter of teaching 'specialised varieties' of English. The fact that language is used for a specific purpose does *not* imply that it is a special form of the language different in kind from other forms. (Hutchinson & Waters 1987: 18)

The declared non-existence of SVEs obviously pushes all ESP processes into the learners' present synchrony and practically excludes the diachronic perspective from practitioners' interests.

In this paper, I attempt to build an approach to the subject by starting from diametrically opposed hypotheses which I detail as follows. There exist specialised languages – e.g. SVEs such as medical or legal English – and they develop as enduring language phenomena independently from any teaching or learning situation. Historical evidence attests to the publication of specialised dictionaries as early as the 17th century in the European context, showing that language specialisation applied to major European idioms long before ESP developed in the 1960s. The “specialised” nature of SVEs does not derive from learners' use or needs, but from specialised domains – such as professional activities or intellectual disciplines – and from their related specialised communities. These domains pre-exist SVEs because it is implausible to assume that medical English generated medicine or that legal English generated common law. Common sense observes that medicine generated medical English, German or French and not the other way around. If SLs derive from specialised domains and communities, the particular relationships between these and the language are to be carefully explained. The inherent diachronic character of SLs results from their social nature and the main part of the paper's contribution is to put forward a convincing theory that embeds them into social reality. These are the main hypotheses of this paper and, since I assume that specialised domains generate specialised languages, I shall first examine the notion of “specialisedness”.

1.2. Defining “specialisedness”

Throughout this paper, I will use “specialised” as the standard qualifier characterising the varieties of language under study. However, authors vary in their choice of qualifiers. For example, ESP authors have taken some time to decide on the “S” in ESP. They first used special, specialised or specific until some consensus generalised “specific” in the 1990s (Williams 2014: 138). Similarly, domain content is varyingly called disciplinary knowledge, expert knowledge, specialist or specialised knowledge. For the sake of consistency, I opt for the family of terms deriving from the verb to specialise, like specialist, specialisation, specialty, specialism, specialised, etc. I think that, when contrasted with “general English”, as is often the case, “specialised English” or “Specialised Varieties of English” offers the clearest expression of opposition. This choice is also consistent with the French notion of *langue de spécialité* which I espouse. It relates a language to a specialty, i.e. a specialised domain of activity or an academic discipline, and the intentional approach I propose accommodates this view.

The notion of specialised domain is familiar enough and several examples have been mentioned above. However, since the specialisation process extends to other realities like languages, communities and people, it may be worthwhile to examine the meaning of the abstract notion of specialisation (the process) or even “specialisedness” (the character of what is specialised). A French scholar, Michel Petit, initiated research on that line and examined the notion of *le spécialisé*

(specialisedness) in relation to specialised discourse (Petit 2010). Interestingly, he distinguished between professional and disciplinary types of specialisedness, adding a “third-type” variety to refer to hobbies, amateur groups, fan clubs and such like which are neither professional nor disciplinary in the strict sense of the term, but which “specialise” in some form of knowledge or activity. Yet, as far as I know, he has never worked out a definition of the abstract notion of specialisedness and of what it is to specialise into something.

Isolating the notion of specialisedness is interesting because we may wonder where it lies. At bottom, is the nature of specialisedness social, cultural, psychological or otherwise? I think it may belong in many of these realms of reality, but that, fundamentally, to specialise takes place in the human mind and that the process of specialisation is part of a class of mental phenomena which John Searle, an American philosopher, calls “intentional states” (1983: 1–4). Although Searle is also famous as a language scholar, he has not studied SLs as far as I know. Yet, I think that his research into the social ontology of language and human institutions provides a highly relevant framework to account for specialised phenomena, in particular specialised communities and languages. This paper complements previous research that aim at harnessing Searle’s theory to structure research into these subjects and it focuses on the social nature and diachronic dimension of SLs.

In his theory of intentionality, Searle identifies mental states which direct the mind towards one particular object outside itself (1983: 1–4; 2004: 19–20, 112–135). In intentional states, the mind refers to or is about objects which are perceived under one particular aspectual shape and not others (Searle 2004: 19, 65, 112, 117; see also 1983: 1). Searle gives the example of water which may be perceived as something to drink or as H₂O (2004: 65). Similarly, an intentional state may be about the sun, but under the various aspectual shapes of a star in the galaxy, or of a divinity in some religion or of a provider of energy for solar panels. Examples of intentional states include to hope, to fear, to hate, to love, etc., and, in that series, “to have an intention” is just one particular form of intentionality (Searle 2004: 19).

As a rule, intentional states are passing mental dispositions that concern an infinity of objects. So, I argue that “to specialise” may be defined as one such type of intentional state where the mind is consistently directed towards one and the same object, in a focused, selective, repetitive and durable way and under a particular aspectual shape (Van der Yeught 2016: 47). For example, someone “specialising” in water perceived as H₂O is perhaps developing a chemist’s interest in water that may materialise into some form of speciality like chemistry. Similarly, the various aspectual shapes of the sun I mentioned above may give rise to various forms of specialisation although the object is the same: astronomy, the study of religions or solar technology.

1.3. Purpose, network and background

In intentionality, the mind produces about the object a mix of beliefs and desires which are in search of their conditions of satisfaction: conditions whereby these beliefs are true or false and these desires are fulfilled or not (Searle 1983: 7–8; 2004: 117–119). In beliefs, the mind tries to formulate propositions which correctly fit the world; Searle writes that they have a “word-to-world direction of fit”, i.e. words try to fit the world. In desires, the mind tries to make the world fit its aspirations which Searle describes as a “world-to-word direction of fit” (Searle 1983: 8; 2004: 118). Intuitively, I think this mix of volitive-cognitive mental states adequately describes the general purpose of specialisation in human beings without involving the psychological features of individual characters. When a person’s mind is increasingly directed towards one particular object, the person wants to know more about it and to develop actions or activities in relation to it to fulfil some purpose made of beliefs and desires. At that stage of the analysis, the process develops in individual minds, but, as I see it, there lies the primitive origins of the professional – volitive and desire-driven

– and disciplinary – cognitive and belief-driven – forms of specialisation that will materialise into specialised domains and communities at the collective level.

In complement to this theory, Searle explains that intentional states do not come alone but rather in connection with many other intentional states which he calls the “network”. For example, directing one’s mind towards the sun as a star may imply beliefs that the cosmos exists and that stars combine into constellations; and desires to observe them more closely during eclipses, carry out experiments on solar energy, etc. Additionally, intentional states also require what Searle calls the “background”, i.e. a set of abilities, skills and dispositions which are not intentional themselves, but which enable intentional states to develop (Searle 1983: 141–159; 2004: 121). In the same example, background abilities may include a sense of cosmic orientation, capacities of observation, comparative skills, mathematical competences, etc. I am now going to examine how this theoretical framework can apply to specialised intentionality when it develops at a collective level.

1.4. From individual to collective “specialisedness”

Since our ultimate concern points to language, a capacity that enables humans to communicate with one another, our next stage of analysis has to explain the passage from individual to collective intentionality. When several people share the same type of intentionality, it becomes collective and Searle devoted a whole book to the subject: *The Construction of Social Reality* (1995). He explains that collective intentionality develops when people cooperate – e.g. in sports teams, orchestras or firms – to achieve the satisfaction of their common beliefs and desires as a group (1995: 23–26; 2010: 43–45, 54–56). This fits nicely with specialised intentionalities since individuals who share the same types may meet in amateur groups or clubs (of sun-gazers in our example) to further their common goals.

At a higher level of organisation, these individuals may establish or join associations with professional and/or disciplinary objectives which form fully fledged specialised communities. In doing so they generally immerse themselves in a body of knowledge and know-how harnessed to serve a common purpose – a specialised domain or speciality – which results from the accumulated experience of people sharing the same intentionalities. In the sun example, that would be astronomy. These domains are to be distinguished from the people that form these communities. Domains like medicine, science and law transcend their hosting communities since they expand over various countries and continents and develop over long periods of time, sometimes centuries and even millennia. Many of them constitute World 3 “objective knowledge” as Karl Popper understands it (Popper 1994 [1972]: 106–190; 1978; see also Van der Yeught 2016: 50–51). Basically, the intentional approach explains how individual specialised intentionality may become collective and form specialised communities. The following section now examines how the process also creates social reality.

1.5. From collective intentionality to social reality: the institutional dimension of specialisedness

When intentionality becomes collective, it develops the highly significant power of creating social reality thanks to declarative speech acts and collective acceptance. Searle explains that a bewildering number of social facts are created by explicit or implicit declarative speech acts which take the form of constitutive rule “X (object or person) counts as Y (is assigned function Y) in C (context C)” (Searle 1995: 43–46; 2010: 9–10). For example, this piece of paper (X) counts as a \$20 bill (Y) in the United States (C). The power of constitutive rules is that, in specific contexts C (here, the U.S.), they create social reality (here, money) by attaching a new symbolic, semantic or status function Y (here, the status of money) to an object or person X (here, a piece of paper marked “\$20”) that X cannot have through its own brute characteristics.

The rule is effective if it is socially recognised: e.g. pieces of paper that have specified standard characteristics count as money in the U.S. through the public acceptance of the rule that creates the institution of money in that country. The same applies to an infinite number of other social phenomena that are founded on similar constitutive rules: marriage, presidential elections, companies, cocktail parties, wars, football matches... The astonishing power and discretion of constitutive rules come from the fact that they are largely “invisible”, i.e. people generally use them without being aware of their existence and without even thinking that they accept them to create these social phenomena (Searle 1995: 4–5, 47–48). Searle calls them institutions and defines them as systems of constitutive rules that have the power to create institutional facts, i.e. elements of social reality the existence of which stems from a constitutive rule.

[...] institutional facts can exist only in human institutions. (1995 : 27)

An institution is a system of constitutive rules and such a system automatically creates the possibility of institutional facts (2010 : 10).

While a large part of the objective knowledge of specialised domains (e.g. exact and experimental sciences) does not result from the collective acceptance of constitutive rules, the main portion of the social reality of specialisedness falls under Searle’s explanatory framework. In a sample of institutions, he lists general forms of human and professional activities “that are not themselves institutions but which contain institutions” and they are specialised in nature: “science, law, medicine, academia” (2010: 92). As a result, all specialised institutions create an infinite amount of institutional facts to serve their intentional purposes. A characteristic example is that of the American community of Certified Public Accountants (CPA) which uses official accounting rules called GAAP. The acronym stands for Generally Accepted Accounting Principles, and the qualifier “Accepted” clearly reveals the underlying rule constituting U.S. accounting regulation: “GAAP (X) count as the official accounting rules (Y) in the United States (C)”.

This intentional approach to specialisedness thus provides the basic theoretical framework that can explain how SLs are embedded in social reality and in diachrony. I will now develop these points in the following section.

2. How collective intentional constitutive rules generate SLs

2.1. Assigning the conventional power of symbol and meaning

Searle details the structure of function Y as accepting the assignment of “conventional power” on X in context C (1995: 104). This conventional power is the representation of a status, a symbol or a meaning assigned to X. Simple objects may be assigned symbolic powers and specialisedness makes use of many of them in insignia, uniforms, court dress, university gowns, etc., which are common in many specialised communities. For example, the Rod of Asclepius (X) counts as the professional symbol (Y) of doctors in (generally) western societies (C). Similarly anchors represent seamen, wings airmen and mallets lawyers (in the U.S., but not in England).

Words are objects too, and they can also be assigned symbolic power or meaning through constitutive rules. Because specialised communities are institutions, they create specialised institutional verbal facts which generate specialised languages. In many cases, a new meaning is assigned to an already existing word. For example, English-speaking stock market operators call pessimistic investors “bears”. The constitutive rule then is: “‘bear’ (X) counts as ‘pessimistic investor’ (Y) in stock market English (C)”. Other examples include “cloud” in computing, “sherpa” in diplomacy, “string” in physics, “sprite” in astronomy, “cluster” in economics... Alternatively,

new terms are often coined to be specifically assigned a particular meaning so as to avoid any misinterpretation; many of them are validated by official domain experts. Examples include quasar in astronomy, deoxyribonucleic acid in chemistry, *Pipistrellus pipistrellus* (a common type of bat) in zoology. The rule is: *Pipistrellus pipistrellus* (X) counts as common bat (Y) in zoology (C).

Specialised conventional meaning power may apply to words, but also to phrases, sayings and to particular types of discourse like genres. For example, “My word is my bond” counts as the motto of the London Stock Exchange; the IMRaD format counts as the standard genre in academic research. In many specialties, different types of texts like reports, memoranda, abstracts, research papers, etc., are highly codified forms of discourse, and often genres in their own right, following acceptance of constitutive rules by the related communities. I will now clarify how the approach accounts for the difference between specialised and general language.

2.2. Clarifying the difference between general and specialised language

The difference between general and specialised language is a long-standing issue in SL studies. The answer derived from this paper’s approach is that SLs are generated by constitutive rules whereas general language is not. Searle explains that language is the “primary social institution” because “it is constitutive of social reality”, but that it is the only institution which is not created by Declaration (2010: 109–110). The sentence “Snow is white” needs no socially accepted constitutive rule to signify that snow is white: its meaning is sufficient (ibid.: 112). On the other hand, in constitutive rules, language assigns some new function to X that did not previously exist in X and the process creates some new form of social reality. Two examples illustrate the point in a specialised context. Let us consider sentences (1) and (2):

- (1) Bears are dangerous animals.
- (2) In stock market downturns, bears are dangerous animals.

Sentence (1) needs no other information to mean that bears are dangerous animals. This is its bottom meaning in any context. Sentence (2) contains exactly the same declaration but a specialised context is added (“in stock market downturns”). This change in context triggers the constitutive rule mentioned above – “‘bear’ (X) counts as ‘pessimistic investor’ (Y) in stock market English (C)” – which is necessary to make sense of the message. In this new context, the meaning of the sentence is that when stock prices fall, “bears” often resort to “bear sales” (or short-selling, a speculative operation to make money by selling shares you don’t have, a move which often results in further price declines and may cause a crash). In sentence (2), just one word, “bear”, is assigned specialised meaning, the rest is plain English. Yet, that word introduces an overriding pragmatic context which is required by the conditions of satisfaction of the declaration. This context opens up to a whole world of specialised intentionality and presuppositions which contaminates the rest of the sentence and specialises the message, separating insiders – who share in this intentionality – from outsiders – who don’t (for further detail, see Van der Yeught 2016: 55–56). Searle observes that institutions “are enabling structures that increase human power in many different ways” (2010: 105). Likewise, the new function assigned to “bear” has enabling effects that go beyond the general meaning of bear. It enables stock market operators to serve their domain’s purpose; e.g. they may communicate professionally with other traders, analyse situations, draw conclusions and act accordingly. This enabling power is the main motivation behind the specialisation of language: it creates a social reality that helps specialists to improve the conditions of satisfaction of their beliefs and desires. Additional explanations on this point are given in section 3.

To conclude on this question, the need of constitutive rules to make sense of messages is one of the key characteristics of specialised discourse. This does not imply that all discourse that require constitutive rules to be understood is necessarily specialised: army passwords, and coded messages,

which are also created by constitutive rules, are good counter examples. An additional necessary criterion to generate specialised language is that constitutive rules have to stem from specialised communities and serve the purpose of specialised domains.

The approach to introduce the study of the diachronic dimension of SLs now needs to be fine-tuned and I am going to do so by focusing on the C context variable in constitutive rules.

2.3. The crucial importance of the C factor for meaning

In constitutive rules, the context variable is always a crucial determinant of meaning, but all the more so in specialised contexts, even within the same language. Stock market operators trade “shares” in Britain, but “stocks” in the U.S. Yet, in British accounting, “stocks” are what their American colleagues call “inventory”. Context also determines the degree of specialisation of terms. For example, the term Omega 3 was mostly used by chemists in the 1930s when it was invented. At the time, the constitutive rule of meaning was strictly limited to domain specialists and the term was highly specialised. Nowadays, the meaning has not changed, but context C has dramatically widened since the 1980s and the term is now widely accepted in general English (and in many other languages). Similarly, “Oedipus complex” in psychoanalysis and “cloud” in computing have “despecialised” by a widening of context. I am now going to examine the relationships between the contextual variable and social reality.

2.4. Building SLs into contextual social reality and into diachrony

Social reality is made of the iteration of constitutive rules and interlocking institutional systems (Searle 1995: 80–81, 116):

[...] there are institutions within institutions. For example, the U.S. government, one institution, contains Congress, another institution, and Congress sets up government departments, other institutions. Business corporations set up subsidiary businesses. (Searle 2010: 92)

As sets of constitutive rules, specialised communities contain other institutions such as research labs and professional groups; institutional objects such as insignia and uniforms; and institutional facts such as the fact that Mr Smith is a doctor or Mr Jones a lawyer. The latter specialists are also SL users and this status may be acknowledged by their communities through an implicit constitutive rule such as: “a competent SL user (X) counts as a specialist member (Y) in such specialised community (C)”.

According to Searle, constitutive rules provide people with what he calls “deontic powers”. He defines them as “rights, duties, obligations, requirements, permissions, entitlements” (2010: 9). For example, the rule “Barack Obama (X) counts as the president (Y) in the U.S. (C)” entitled Obama to all sorts of powers and obligations related to his presidential functions. In the same way, being counted as a (competent) SL user provides people with similar deontic powers. The pompous or over-sophisticated use of technical jargon sometimes displayed by specialists to impress their audiences indicates that SL use is an effective status indicator (Searle 1995: 119–120). Conversely, the timidity of profanes in SL use highlights their lack of status in the specialised domain and community.

The rights, permissions and entitlements of SL users include the capacity to serve the domain’s purposes, the possibility to claim they are members of a specialised community because they master its language code, the recognition of their authority in the related specialisedness as displayed by their fluency in the language, the opportunity to further their own interests and ambitions in the specialised domain by using oral or written discourse, etc. On the other hand, SL users also have

obligations and duties. They have to keep up with the evolution of the language and they generally face a professional and/or technical obligation of accuracy and relevance in using terms. For example, doctors' diagnoses, judges' verdicts, auditors' recommendations and scholars' research papers require the careful application of technical terms and the strict observation of discourse deontology. Indeed, professional malpractice may concern the faulty use of specialised language. Many specialist communities and domains have their own deontology (e.g. lawyers, doctors, scientists...) which are often couched in specialised discourse: e.g. the Hippocratic Oath illustrates doctors' general deontic powers and the correct use of medical English falls under its obligations. When they study SLs, learners not only strive to achieve linguistic competence, they also aim at accessing the deontic powers associated with SL use. The acquisition of status in SL learning should also be taken into account by SL teaching.

For all these reasons, the deontic powers created by the constitutive rules related to SL use generate complex interlocking institutional connections which insert SLs into the contextual fabric of social reality. As a result, SLs are structurally immersed in a human world of causes and consequences, rights and obligations, opportunities and duties. Without the (C) variable, constitutive rules do not operate, and since (C) comprises time, diachrony is constitutive of SL ontology. In empirical terms: men are born, live and die in the dimension of time, their social world's backdrop is necessarily diachronic and the temporal dimension of SLs cannot be ignored.

I now have to refine the notion of diachronic dimension and sort out several types of diachronic determinants. In SLs, at least two main levels of diachronic constraints can be distinguished: (1) one that bears on the constitutive rules themselves; and (2) one that stems from the context (C) variable of the rules.

2.5. Examining two diachronic dimensions of SLs

2.5.1. The diachronic dimension of constitutive rules

In general terms, the diachronic dimension of all constitutive rules is empirically obvious since rules appear and disappear in human history. There was a time when the institution of money did not exist and a time when it emerged and developed; a time when computing did not exist and now. Searle explains that the emergence of institutions is sometimes extremely gradual so that no one knows exactly when constitutive rules initially came into action (1995: 21–22; 2010: 94–95). Conversely, the origins of institutions may also be sharply situated in history especially when they result from datable declarative speech acts (e.g. when a war is declared or a meeting adjourned).

Similarly, the specialisation of language may be extremely gradual and difficult to date – in particular when it mainly serves oral communication – or easy to position in history. For example, we know that the financial meaning of bear roughly dates from the end of the 17th century in England, but that the meaning of cloud in computing most probably appeared in 1997 (Lacaze 2013: 56). The diachronic dimension of constitutive rules thus informs us on the general history of SLs. We know whether terms, phrases or genres are old or new, still active or obsolete.

2.5.2. The diachronic dimension implied by the C variable

As regards the context (C) variable in constitutive rules, it concerns both the perimeter where a rule applies – let's call this rule context the “macro-context” – and the context of the actual utterance which puts the rule into effect – let's call this utterance context the “micro-context”. In specialised language, these two contexts have to coincide to make sense of discourse. In theory, the macro-context may embrace an infinity of likely spatial and temporal components such as place, social circumstances, historical events, weather conditions, etc.; but in specialised language, an overriding

contextual environment is the specialisedness itself or subparts of it. For example, in the macro-context of stock market English, subcontexts may include the 1929 Great Crash, stock market indices, share analysis, trading regulations, chartism, etc. Example (2) above makes sense in the subcontext of market evolutions within the macro-context of stock market English. Still, macro-contexts always contain, explicitly or implicitly, a temporal dimension which derives from the fact that men's lives develop in space and time.

As far as the utterance micro-context is concerned, it also includes, explicitly or implicitly, a temporal dimension since men's sayings occur in space and time. In specialised contexts, these space and time conditions generally have specialised characteristics deriving from the fact that specialised speech acts ordinarily serve domain purposes where and when needed.

Because the ultimate purpose of studying SLs is to teach them, the following section examines two useful tools that help to master SL contextual constraints: specialised dictionaries and specialised encyclopaedic knowledge.

3. Mastering the context variable in SLs: specialised dictionaries and encyclopaedias

3.1. Specialised dictionaries

In previous publications, I proposed that same-language specialised dictionaries are helpful indicators of the emergence and evolution of SLs (Van der Yeught 2012: 18–19, 42–44; 2016: 54). Even very old dictionaries feature data indicating publication dates which are precious for the historical knowledge of SLs. Moreover, in the context of this paper, I can give an additional reason for the usefulness of specialised dictionaries. They are in fact compendia of the constitutive rules that produce SLs. Each entry can be deciphered as an underlying X-counts-as-Y-in-C rule, with C standing as the specialised domain itself, or subparts of it. As such, specialised dictionaries achieve the codification process of constitutive rules (Searle 1995: 87–90) and give them a durable written form. Thus, they contribute to the creation and maintenance of specialised meaning in language over long periods of time (Searle 2010: 115–116; Charpy 2011; Van der Yeught 2012: 19, 42–44).

Still, following explanations given in section 2.5.2., specialised dictionaries only offer rule-related macro-context information. For example, geographic or national contexts of use may be specified, as well as historical remarks about the emergence or obsolescence of terms. In order to make sense of specialised discourse, a connecting mechanism between macro- and micro-contexts has to be put into action. The specific knowledge competence that helps to achieve that connection is now examined.

3.2. Specialised encyclopaedias

Mastering SLs means using them successfully to serve domain purposes. This generally implies the fluent application of their constitutive rules. Learners are taught to achieve this grasp as naturally as possible, i.e. as casually as when people use money while being unaware of the rules that make money a social reality (Searle 1995: 47; 2010: 107). However, SL teachers need to know much more than their students. Besides being competent users of the language, they have to master as many of its constitutive rules as they can in order to interpret messages and teach them properly. In earlier research (Van der Yeught 2016: 56–57), I suggested that this knowledge could be called “specialised encyclopaedic knowledge”, following Umberto Eco's general definition of encyclopaedic knowledge:

In the interpretive process, encyclopaedic knowledge operates as a set of instructions that properly insert textual elements in their relevant contexts and achieve the correct disambiguation of terms. (1986: 68)

In the case of SLs, the appropriate set of instructions technically consists in relating the relevant constitutive rule triggered by the utterance and, in particular, in making sure that the rule macro-context and the utterance micro-context coincide. For example, in sentence (2), the specialised encyclopaedia (SE) of stock market English identifies “stock market downturns” as a micro-contextual subpart of the stock market domain and inserts “bear” in the constitutive rule “‘bear’ (X) counts as ‘pessimistic investor’ (Y) in stock market English (macro-context C)”. It observes that both “bears” and the micro- and macro-contexts coincide in a felicitous way to make sense of the word “bear” in both contexts. So, SE instructions eliminate the general meaning “bear-plantigrade” from the sentence and applies the Y specialising function to “bear” so as to interpret the utterance correctly as: “In stock market downturns, pessimistic investors (and likely short-sellers; see section 2.2.) are dangerous animals”. In imaginary sentence (2b) “In stock market downturns, *lions* are dangerous animals”, the SE can find no constitutive rule assigning specialised meaning to “lion” in financial English. So “lion” in the micro-context finds no matching “lion” in the macro-context and the mechanism of instructions does not operate. Sentence (2b) makes no sense in stock market English, nor in general English for that matter.

According to Eco, encyclopaedic knowledge is not a systematic accumulation of knowledge as can be found in ordinary encyclopaedias. It is the potential and infinite capacity to interpret messages by desambiguating terms according to their relevant contexts. The same applies to SEs. It is therefore impossible to build exhaustive compendia of specialised interpretive processes, but attempts to chart some SL fields have been engaged in financial English (Van der Yeught 2012) and English for economics (Resche 2013). Naturally, since encyclopaedic knowledge consists in matching specialised macro- and micro-contexts, they greatly benefit from specialised dictionaries. In particular, the aptly named “encyclopaedic” dictionaries offer valuable support to SEs since their purpose is to be mass providers of macro-contexts and subcontexts. Obviously, SL learners have to acquire as much specialised encyclopaedic knowledge as they can to achieve a good grasp of the language; the following section explains why mastering that key competence is primarily the mission of SL teachers.

3.3. Specialised encyclopaedias as the core business of SL teachers

Depending on domains, SEs may variously overlap with specialised cultures and the two notions may easily be confused. Nevertheless, I would argue that, although they definitely cross-fertilise each other, they are analytically fairly distinct. Even in specialised contexts, culture embraces wider components than SEs, such as behaviour, attitude, mindset, norms, values, heroes, rituals, especially if one retains Hofstede’s proposition that “culture is collective programming of the mind” (2001: 1). On the other hand, SEs are essentially linguistic and interpretive, and because interpretation involves context, SEs are largely diachrony-based. This point has major consequences for SL pedagogy.

Several ESP authors have highlighted the loss of pedagogical authority when teachers are faced with specialist knowledge that is better mastered by their students.

One of the most important features of ESP in relation to General English is that the status of English changes from being a subject in its own right to a service industry for other specialisms. In many cases this leads to a lowering of status for the teacher. (Hutchinson & Waters 1987: 164. See also Strevens 1988: 9; Dudley-Evans & St John 1998: 4, 188)

They conclude that teachers have to accept being corrected by learners (“Allow students to put you right” [Stevens 1988: 9]) and that domain specialists (also called subject specialists, field specialists, content specialists, subject teachers...) should be called in case of difficulty. I think they have little faith in the added value that properly SE-trained teachers can bring into SL learning. Admittedly, students may successfully correct teachers on domain knowledge, and domain specialists like lawyers and engineers can make wonderful teachers. Still, most of them are not linguists and show more interest in the present and in the future than in the past. Their jobs do not make them aware of the constitutive rules that create SLs and they do not necessarily have a deep knowledge of the history of their domains, communities and languages.

On the other hand, SE knowledge is the competence *par excellence* of SL teachers. In essence, it is the capacity to connect the macro-contexts of SL constitutive rules to the micro-contexts of specialised discourse to make sense of the latter. Under the simplicity of this programme lies an infinity of interpretive situations, strategies and outcomes. They require an equal infinity of linguistic and contextual domain knowledge which constitute SEs. SE knowledge is the capacity to disentangle the complex contextual mix of language, domains and social reality. It provides teachers with historical insight into the thickness and subtleties of SLs, but it does not necessarily turn them into ivory tower erudites as is sometimes feared. On the contrary, it offers depths of experience from which they can draw to meet their students’ needs. Finally, even if SE knowledge has no limits, large swathes of it may be accumulated, published in SL descriptions and passed on to new generations of teachers as a form of Popperian World 3 objective knowledge. SE competence is no lowering factor of teacher status; quite the contrary.

To illustrate this point, I give the final word to John Swales in a 1985 quotation which still rings particularly true today, especially in the context of this paper:

[D]espite 20 years’ work in ESP and despite the large number of description and discussions of its theory and practice, ESP practitioners in my experience tend to ignore the past. ESP practitioners are concerned with the ‘here and now’ of their own working situation [...] At this point, it may be objected that such historical information is of little value to the hard-pressed ESP practitioner. However, I would answer this objection by suggesting that background knowledge is useful, perhaps even necessary, if we are to distinguish local solutions from general conceptual developments. (1985 : 2-3)

In a prescient way, Swales expressed genuine diachronic sensitivity. He realised that ESP and historical information are not enemies, and that, on the contrary, the past may be useful to ESP practitioners. In the context of this paper, I would simply replace his “background knowledge” by “specialised encyclopaedic knowledge”, and his “general conceptual developments” by the intentional approach to SLs.

4. Discussion: dispelling a sense of déjà vu

While reading these lines, some colleagues may have the feeling they have seen some of these explanations before. Several authors have already highlighted the institutional and conventional nature of specialised languages and analysed them as social constructs. For example, Vijay K. Bhatia (2004) elaborates on the subject, notably in chapter 7 (185–188).

All discourse forms, especially those used in institutionalized contexts, are socially constructed and negotiated. At the very heart of most frameworks for the analysis of discourse, especially as genre, is the belief that there is nothing like a universal form of discourse for structuring knowledge. There can only be a ‘consensus or an agreement’ (Bruffee 1986: 777) among the members of specific disciplinary communities to express their concerns in specific discursive forms. (ibid.: 185)

Genres are products of an understanding or a prior knowledge of disciplinary or institutional conventions, which are responsible for regulating generic constructs, giving them an identity and internal ordering (ibid.: 186-7)

Bhatia's conceptual apparatus (institution, social construct, convention, agreement...) is strikingly similar to the one deployed in this paper. Am I merely repeating what Bhatia has argued before? Not quite, and for two reasons.

4.1. Getting priorities right: first, specialisedness; second, language

The first comes from the fact that Bhatia's main focus is on language (here, professional and academic genres) whereas my primary concern is to account for the SL phenomenon by relating specialisedness to language. In Bhatia's developments, specialisedness only appears in the background of argumentation, as a qualifier of genres and under a large variety of differing descriptions: "discipline", "professional conversations and practices", "community's body of knowledge", "disciplinary cultures", "disciplinary knowledge", etc. (ibid.: 185–204). These features suggest that in Bhatia's genre theory, "specialisedness" has not been theorised as a central operative concept, namely as the essential originator of the specialisation of language (or of genres). Specialisedness is merely presented in descriptive and contextual terms while language occupies centre stage. I think that this position is flawed from a theoretical point of view because it misplaces cause and effect. In my view, specialisedness occupies centre stage and operates as the causal factor that generates SLs.

The reason for this is that language is not intentional in itself; it is part of the skills and abilities that form the "background" of intentional states presented above in section 1.3. (1995: 129–130). Medicine generated medical English because SLs serve domains' purposes just like accounting serves banking or physics serves astronomy. These purposes derive from the domains' intentionalities, not from language. Yet, just like Bhatia, most ESP authors see things the other way around. They believe that the function of SLs is to enable communication. As Ken Hyland puts it: "ESP itself steadfastly concerns itself with communication" (Hyland 2013: 96). In my view, SLs cannot have purely communicative functions because specialised constitutive rules create new meaning in discourse that is beyond general communication. In other words, I think it is impossible to propose a theory of SLs without developing a theory of specialisedness first.

The epistemological error of giving priority to language and downplaying specialisedness largely explains why the relationships between disciplinary knowledge and language remain an unresolved issue for Bhatia and ESP colleagues:

[...] we still have little understanding of the relationships between language as communication and language as vehicle for the expression of disciplinary knowledge. ESP practitioners still get nervous about having to deal with disciplinary knowledge as part of their language training. Although there is some awareness of the need to integrate language training with the communication of disciplinary knowledge, in practice it is still considered a difficult task. (ibid.: 204)

Unsurprisingly, he then continues by suggesting calling all sorts of "domain specialists" to the rescue of language teachers:

In order to move in that direction, the first step will be to bring several stakeholders together, which include not only language teachers and learners, and subject teachers from the academy, but also professionals, employers and practitioners from the workplace. (ibid.: 204)

Some ten years later, the *Handbook* admitted that the same subject still poses problems to ESP practitioners: "[o]ne of the most vexing issues for ESP praxis is the need for at least some specialist

knowledge” (Belcher 2013: 545). The enduring character of the problem does not result from some mysterious conundrum lying beneath the relationship between specialisedness and language. It comes from the bias of ESP linguists that prevents them from analysing SL ontology correctly: namely by putting language considerations in second place and acknowledging that language specialisation derives from specialisedness. In theoretical terms, they assign some intentionality to the background capacities of language while ignoring the causal power of specialised intentionality. They reverse the real order of priorities and so cannot account for the relationships between language and specialisedness. Searle helps us to get our priorities right:

[T]he philosophy of language is a branch of the philosophy of the mind. (1983: vii)

Language is derived from Intentionality and not conversely. The direction of pedagogy is to explain Intentionality in terms of language; the direction of logical analysis is to explain language in terms of Intentionality. (1983: 5)

The intentionality of language has to be explained in terms of the intentionality of the mind and not conversely. [...] The meaning of language is derived intentionality and it has to be derived from the original intentionality of the mind. (2004: 113)

4.2. Opting for a holistic view

The second reason lies in the fact that in Bhatia’s presentation, the institutional character of genres is isolated from other institutional facts. So, we do not know exactly what sort of institutions genres are if compared to other ones, and which characteristics they share with those. While I broadly agree with Bhatia’s views, I find in Searle’s constitutive rule an explanatory mechanism that fully clarifies the conventional nature of all institutions. The intentional approach to SLs puts specialised phenomena (intentionality, communities, symbols, language...) into perspective alongside myriads of other institutions that constitute social reality. In that holistic perception, the relationship between specialisedness and language is not mysterious at all. It is similar to millions of other relationships that connect elements of human life in an ascending order of complexity: from elementary mental states to speech acts, to communities, to basic institutional facts, to sophisticated institutions, and finally to “the structure of human civilization”, the subtitle of Searle’s 2010 book. The theory of intentionality seamlessly explains how brute facts can be endowed with symbolic functions and evolve into complex social constructions. It enables us to make sense of specialised phenomena as parts of the ontology of social reality.

For these two reasons, this paper offers an epistemological programme which is very different from Bhatia’s although both apparently resort to broadly similar notional tools. I do not disagree with Bhatia’s views, notably on the institutional character of SLs, but my grounding hypotheses are diametrically opposed and their outcomes are very different.

Conclusion

This paper examines the diachronic dimension of SLs as part of their social ontology. It has recourse to Searle’s theory of intentionality to account for the nature of SLs as enduring social phenomena. The application of the intentional framework to SL studies progresses through gradual stages of analysis. The process of specialising is first identified as an individual intentional state of the mind made of beliefs and desires looking for their conditions of satisfaction. Specialised individual intentionality may turn collective and form specialised communities that act to serve their professional and/or disciplinary purposes. To that effect, they use accepted “X-counts-as-Y-in-C” constitutive rules to create conventional forms of social reality that Searle calls institutions: professional bodies, research units, statuses, titles, symbols... These also include SLs that are created by rules that assign new meaning to general words, that coin new terms or assign a

particular status to types of discourse such as genres. In the process, the C variable indicates context which always contains diachrony due to the temporal nature of human lives and activities. Differing types of contextual information are then distinguished depending on their positions in the rules (macro-context) or in the utterances or discourse (micro-context). Two tools are recommended to make the most of contextual information in SL use. Specialised dictionaries list the constitutive rules that are accepted by specialised communities and provide macro-contexts; and specialised encyclopaedic knowledge implements the disambiguation and interpretation of specialised discourse. The discussion section insists on the order of priorities in analysing SLs, namely that language specialisation results from specialisedness and not the other way around. It also underlines that the intentional approach proposes a thoroughly holistic analytical perspective since it is built on connections involving the mind, language, institutions, history and communities as components of social ontology. In essence, this holistic perspective is probably similar to the views expressed by Jean-Jacques Lecercle in his 2001 plenary lecture on SLs when he remarked:

[...] specialised languages imply the mediation of history and society, as any external point of view on language also implies [...]. If specialised languages exist together with a specific field of study, it is because linguistic phenomena have never been cut off from historical, cultural and social mediation. In other words, they cannot possibly be isolated from institutions, rituals and practices; taking this risk would be extremely simplistic and hazardous. (Lecercle 2001: 7)¹

More than fifteen years on, this position is still uncommon. This paper is also meant as a tentative support to its pioneering relevance in SL studies.

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¹ My translation

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