

# Translation in the Digital Age

**Michael Cronin**



New Perspectives in Translation Studies

# Translation in the Digital Age

Translation is living through a period of revolutionary upheaval. The effects of digital technology and the internet on translation are continuous, widespread and profound. From automatic online translation services to the rise of crowd-sourced translation and the proliferation of translation apps for smartphones, the translation revolution is everywhere. The implications of this revolution for human languages, cultures and society are radical and far-reaching. In the information age that is the translation age, new ways of talking and thinking about translation which take full account of the dramatic changes in the digital sphere are urgently required.

Michael Cronin examines the role of translation with regard to the debates around emerging digital technologies and analyses their social, cultural and political consequences, guiding readers through the beginnings of translation's engagement with technology, and through to the key issues that exist today.

With links to many areas of study, *Translation in the Digital Age* is a vital read for all students of translation studies.

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## **New Perspectives in Translation Studies**

Series editor: Michael Cronin holds a Personal Chair in the Faculty of Humanities and Social Sciences at Dublin City University.

The *New Perspectives in Translation Studies* series aims to address the changing needs in translation studies. The series features works by leading scholars in the field on emerging and up-to-date topics in the discipline. Key features of the titles in the series are accessibility, relevance and innovation.

These lively and highly readable texts provide an exploration into various areas of the field for undergraduate and postgraduate students of translation studies and cultural studies.

### **Cities in Translation**

*Sherry Simon*

### **Translation in the Digital Age**

*Michael Cronin*

For Fionnuala and Lasairfhíona, brightness of brightness

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# Introduction

## The translation age

I open my eyes and I don't know where I am or who I am. Not all that unusual – I've spent half my life not knowing. Still, this feels different. The confusion is more frightening. More total.

(Agassi 2010: 3)

Andre Agassi has just woken in his hotel suite in New York City. He is playing in the US Open that will turn out to be his last US Open, in fact, his last tournament ever. A cocktail of health problems and personal issues will cause him to retire from the world of professional tennis at the age of thirty-six. His sense of confusion will be familiar to anyone engaged at whatever level with translation in the present moment. The omnipresence of online translation options, the proliferation of smartphone translation apps, the relentless drive towards automation in large-scale translation projects, the fundamental changes in literacy practices as reading migrates from page to screen, the unforgiving instantaneity of electronic communication, the responses, as demanded 24/7, the ever-changing wardrobe of digital translation tools such as endlessly mutating translation memory software – all of these factors contribute to the sense that 'this feels different'. There may have been changes before but this time, the 'confusion is more frightening. More total.'

This book addresses that sense of confusion. Over the last decade, speaking to audiences in different parts of the world, the same questions keeps returning: Is there a future for translators? In the age of Google Translate, is the human translator condemned to large-scale extinction, or to the quaint peripherality of the Sunday hobbyist? The demand for translation keeps growing apace in the contemporary world, but will humans continue to be asked to service this need, or will it be our machines that will do the bidding?

What the questions express is a feeling, which I believe to be well founded, that translation is living through a period of revolutionary upheaval. The effects of digital technology and the internet on translation are continuous, widespread, and profound. They can no longer be quarantined into geekish conclaves, evaluating the most recent software or ritually ridiculed in the

## 2 *Translation in the Digital Age*

humourless recitation of the latest machine-translation howlers. Students, scholars, and, indeed, anyone interested in the future of human cultures and languages, would be well advised to watch carefully what is happening to translation in a digital age.

This book is a work of interpretation not prophecy. In an area where there is an endless stream of technical innovations, it would be foolish in the extreme to try to predict what might or might not be the ultimate success of automated systems in dealing with problems or questions of translatability. Its aim is rather to understand in a broader sense the implications for language, culture, and society of translation's engagement with technology. In order to do this, it takes in disciplinary perspectives from anthropology to zoology and deals with historical examples ranging from the river settlements of the Tigris and the Euphrates, to the changing fortunes of the Australian military in the contemporary world. Throughout the book, there is a deliberate avoidance of the idle partitioning of evidence, and literary translation is discussed alongside technical, commercial, and scientific translation. There is repeatedly the contention that technology is not simply an accessory, an adjunct to translation, but that it has been central to the definition of translation activity in many different societies and in many different historical periods up to and including, of course, our own.

Frances Yates, the eminent historian of the European Renaissance, has commented on the seeming paradox of the march forward being subject to the look backwards:

The great forward movements of the Renaissance all derive their vigour, their emotional impulse from looking backwards. The cyclic view of time as a perpetual movement from pristine golden ages of purity and truth through successive bronze and iron ages still held sway and the search for truth was thus of necessity a search for the early, the ancient, the original gold from which the baser metals of the present and the immediate past were corrupt degenerations.

(Yates 2002: 1)

In any examination of translation in the digital age, there are the twin perils of what might be termed the 'backwards look' and the 'forwards look'. The backwards look is the temptation to see the digital present as evidence of an irredeemably fallen state of translation affairs. In the pristine golden age of the translator's youth people knew how to spell, they read books, they could concentrate on a page for more than five seconds, and they knew the names of all fifty states of the United States of America without having to unholster their smartphone. The forwards look is the equally strong temptation to see the digital present as a world of miracles and wonders, narrated in the breathless corporate prose of 'Isn't it amazing that ...'. In the excitable hyperbole of the cyber apostles, automated translation will mean the end to all human strife, grief, and misery as humans unite in the higher communion of mutual intelligibility.

*Translation in the Digital Age* seeks to avoid the dual dangers of terminal pessimism and besotted optimism by examining closely what is happening in today's translation world. It does, however, make a larger claim which indicates the wider importance of translation for any student of contemporary culture and society. This claim is that our present age, which is often referred to as the information age with its corollary, the knowledge society, should more properly be termed the translation age. The extreme flexibility of digital tools means that they can generate a wide variety of outputs. The most basic laptop with the correct software and internet connections can function as archivist, accountant, game console, library, photo album, estate agent. The variability of outputs of these machines is made possible, in part, by the universal convertibility of binary code, the ability of words, images, sounds to be converted to the universal language of code. In this sense, the radical changes that have been wrought in all areas of life as a result of the advent of information technology are to be placed under the sign of convertibility or translation. It is precisely the metamorphic or transformative effects of the convertible which are at the heart of the digital revolution that makes translation the most appropriate standpoint from which to view critically what happens to languages, societies, and cultures under a regime of advanced convertibility, and to understand what happens when that convertibility breaks down or reaches its limits.

Chapter 1 begins by situating a digital engagement with translation in the long material history of humanity's interaction with tools. It is argued that humanity is not distinct from, but is rather defined by, the possibilities offered by its tools. This centrality of tool use is not, however, used to justify a debilitating form of technological determinism. The chapter goes on to explore both the importance of kinship arrangements for the opening of human communities to the possibility of translation, and how, through the notion of entailment, social and organizational infrastructures are central to the flourishing of material cultures. As societies develop, these cultures are faced repeatedly with the challenge of managing translation relationships over distance, and examples are taken from antiquity and the late Middle Ages to show the emergence of an ethics of proximity in translation, an attempt to deal with the spatial and cultural consequences of expansion. Central to this chapter is the elaboration of what is referred to as the '3T paradigm': trade, technology, translation. In tracing the evolution of early urban cultures, the claim is made that trade, technology, and translation are inseparable in their development, and that any balanced history of these cultures must take into account the close interaction between all three. The interaction is all the more important in that the tendency to exclude any of the three components tends to lead to isolationist or exclusivist readings of particular cultures. As cultures and societies interact, the question of power is inevitably present, and ancient Rome is investigated as a site of acute cultural anxiety around the linguistic consequences of technical and commercial growth. More generally, these anxieties are related to the unforeseen consequences of a new medium, and Marshall McLuhan's notion of the medium as message is revisited for what it might tell us about a material history of translation.

Sixteenth-century England is explored in the context of the relationship between translation and the emerging intellectual ethic of the printing press, a medium that profoundly shapes the message of translation. How the technology of print continues to shape the fortunes of translation is examined in the case history of a nineteenth-century Irish translator, Lady Jane Wilde. Wilde's translations in the late 1840s were a crucial contribution to the emerging imagined community of Irish nationalism, a movement that, like so many similar movements elsewhere, was sustained by the virtual constituency of print. The chapter concludes with a consideration of how, at different moments in human enquiry, space or time has been privileged as a way of understanding human experience, and how both categories are open to the constant interrogation of translation and material culture.

Chapter 2 focuses on questions of language, power, and translation in the digital age. One of the most notable moves in the drive towards the automation of translation is the production of controlled languages. The move towards controlled language is also shadowed by a project to produce a simplified, readily understood version of global English. The chapter examines the implications of these developments and points to the often paradoxical and unpredictable outcomes of the development of supra-national or global *lingua francas*. The paradigm of controlled language and global English is situated in a tradition of Puritan translation in English closely allied to the notion of plain speaking. Less obvious, on occasion, are the costs of speaking plainly. In investigating how the notion of cost is invoked in debates around translation, it is argued that hidden or devolved costs mask the real nature of power relationships between languages, relationships that are deeply embedded in the engagement between translation and technology. This engagement is increasingly bound up with disintermediation, and the chapter explores the consequences for popular notions of translation of the emergence of online translation systems. One consequence is the increasing tendency to represent language in purely instrumentalist terms, that is, getting a message from point A to point B in the shortest possible period of time. What such instrumentalism might imply for science in particular is investigated as a way of challenging certain shibboleths around science communication in the digital age. If the instrumental view of language has become so dominant, this is related to a broader cultural pattern of the triumph of transitivity. Transitivity, the subordination of every activity to a specific, pre-defined end, is no stranger to translation. Novice expectations about there being one right way to do translation, or industry insistence on consistency and standardized outputs, have the transitive as an explicit horizon of expectation. The chapter explores an episode from Renaissance translation history and accounts of user interactions with translation technology to suggest that translation is in many respects anything but transitive in its practice and results.

A powerful ally of a strongly transitive or utilitarian view of translation in the digital age is the ideology of transparency: What You Get Is What You (always) See, and once you can see it, you can get it. In investigating the philosophical roots of this ideology in the nineteenth-century US Transcendentalist

movement and twentieth-century US counter-culture, the chapter considers the consequences for contemporary translation practice of an ideology of transparency. Particular attention is paid to the way one understanding of transparency – transparency as an invitation to opacity – explains the contribution of digital technology to the growth of linguistic diversity. One of the areas of potential opacity is, of course, the true nature of the economic interests at play in the new digital economy and the extent to which translators are active or passive agents. This question of agency is situated in a distinction between digital authorship and digital interaction, and the chapter calls for a heightened degree of digital self-reflexivity in any emerging ethics of translation.

Chapter 3 is concerned with dominant representations of translation in the digital age. The notion of translation as an essential adjunct to the construction of a borderless world is a core concept in what the chapter refers to as ‘messianic’ theories of translation. In this view, translation, powerfully assisted by the digital toolkit, removes boundaries, abolishes frontiers, and ushers in a brave new world of communicative communion. However, it is claimed in the chapter that such messianic theories not only misrepresent obdurate political realities, but also fail to account in any adequate way for what translators actually do in the present and have done in the past. The notion of limits is introduced from an anthropological and philosophical perspective as a way into establishing how translators have allowed the internal and external experience of limits to structure their approach to translation, and how these experiences have, in turn, shaped the collective experience of language and culture. In positing the notion of limits, it is claimed that translation poses a challenge for extensive culture – the endless multiplication of goods, services, or ideas – and that more attention must be paid to the ways in which it is situated in intensive culture, in a culture of non-equivalence. This intensive culture is partly situated in an ecological concern with limits – in particular, the limits to growth – but it also relates to a representation of translation that has a long and enduring history: the idea of identity. The notion that authorship consists of the exact execution of the author’s wishes is central to the emergence of architectural individuality in the Renaissance period. The advent of mass industrial production gives renewed impetus to the regime of identity where the notion of authenticity is predicated on sameness, from the acceptability of banknotes (forgeries try to be identical, but are not), to the saleability of Model Ts (reliable because the same). In tracing the history of changing understandings of literary translation into English in the twentieth century, the chapter looks at the varying fortunes of the semantic regime of identity in translation. Inevitably, what emerges from this historical overview is the paradigm of variability, and this paradigm is linked to the work of translation in the age of digital reproduction. Digital reproduction allows for endless replication of difference, not endless replication of same. The digital object is structured around variability, not identity. The chapter considers the implications for translation of these new forms of digital objects and how they do or do not relate to models predicated on extensive cultures. In particular, the question is asked as to whether translation can be considered as autographic

or allographic, an activity that is primarily the work of a maker or artisan, or an activity that is routinely the unacknowledged work of others.

Chapter 4 explores the impacts of digital technology on translation practice. The underlying logic of the operations of a major translation provider is detailed to show the recurrent tension between local delivery and central control in the production and management of translation. The core concerns of this new translation economy in the digital age relate to volume, time, and cost, and the chapter investigates each of these notions as they impact on the practice of translation in the context of automation and semi-automation. Concerns around the direction of particular forms of translation activity, and particularly the existence of vastly different levels of access to IT services across the globe, have prompted the emergence of new forms of localization, and these are considered in terms of overall geopolitical tensions and corporate strategies. Underlying both the mass provision of translation by global translation providers and local initiatives to promote alternative forms of translation delivery are the shift to ubiquitous computing and the emergence of bidirectionality. Being able to access the internet from a smartphone, or being able to alter content on a website, has far-reaching implications for both the embedding of the digital in our daily lives and how the nature of what is digital is transformed. The chapter considers the implications for translation practice of the emergence of nomadic, interactive computing and details the emergence of new forms of translation production/reception and the translation fallout of crowdsourcing. A fundamental change in this context that is frequently ignored is changing norms of literacy. If translation has typically depended on a deep commitment to, and reverence for, the printed word, what happens when the experience of the printed word shifts from the page to the screen? The chapter asks whether we are moving to an age of post-print translation literacy and what might be the consequences for how translations are both produced and used. Treating the various changes to translation practice as an effect of the pre-eminence of information technology begs the question as to the nature of the technology. In exploring the emerging science of information and the centrality of the notion of convertibility to the digital, the chapter argues that it is information which is a subset of translation, and that it is more accurate to describe our contemporary moment as the translation age rather than the information age. It is as a way of describing specific sets of practices in the translation age that the chapter returns to the notion of transparency, this time to analyse the effects of identifiable practices. The notions of ethical, ostensible, and penal transparency are employed to show how, in everything from the construction of national identity to espionage, the fortunes of translation and the digital are inextricable.

Chapter 5 considers how we might respond to the new forms that translation is adopting in the digital age. The pioneering reflections on translation in the digital age of machine translation theorist and practitioner Alan Kay provide the introduction to a consideration of how two approaches to thinking about translation, 'massive' thinking and 'detailed' thinking, can help situate particular kinds of translation practice in the era of automation and semi-automation.

The strategic importance of detail in translation practice is located within the rising popularity of gist or indicative translation. Underlying both the 'massive' and 'detailed' approaches to translation, it is argued, are two different approaches to the question of the universal. The tension between easy universalism and difficult universalism is seen as bound up with projections of power and influence from which translation is not immune. In order to develop the implications of difficult universalism for translation thinking and practice, the notion of 'gap' is opposed to that of 'difference'. The idea of 'gap' avoids the reifying thrust of typicality that often underlies the invocation of difference, and favours not so much the celebration of identity as the cultivation of fecundity. In this view, translators look to languages and cultures not so much for values as for resources. Where these 'gaps' might be located is, of course, a source of endless conjecture, but it is argued that in translation practices in the digital age, one place to look is in the debates around quality and the pertinence or not of post-editing. These debates can, in turn, be situated within an emerging discourse around digital humanism. Digital humanism, which is an attempt to understand the fundamental changes that have occurred in contemporary culture and society with the advent of digital tools, is a movement of critical reflection, rather than a roadshow of cyber cheerleading. Central to this emergent movement is the philological perspective, the detailed engagement with the meanings and histories of languages and practices in the digitally informed world. How this perspective can be brought to bear on translation's relationship with technology is considered in the light of Ivan Illich's plea for tools of conviviality, for tools that will promote, rather than impede, human flourishing. One of the greatest enemies of this flourishing can, of course, be particular versions of consensual humanism that universalize particular cultural experiences and disguise exploitative relations of power. The chapter proposes a way of thinking about translation in human communities that assumes the permanence of conflict and the necessity to construct community, rather than to assume it. The contribution of translation to the construction of communities is described in a framework that challenges a conventional, genealogical unfolding of pre-set cultural attributes and proposes that the dynamic subversiveness of the company of strangers is the most radical promise of a self-aware translation praxis in our digital age.

The narrator in Somaya Ramadan's novel, *Leaves of Narcissus*, shares Andre Agassi's sense of uncertainty as she faces difficult choices at a particular moment in her life. The Egyptian novelist captures the sense of unknowability that ghosts all change, 'Beginnings, being beginnings, change constantly, change every time' (Ramadan 2002: 4). This, of course, is the danger that attends any attempt to describe a revolution when one is caught up in its midst. The beginnings change constantly, and there is the perpetual risk of being wrong-footed by events. Risk, however, is no excuse for renunciation. It is crucial that any attempt to consider translation in the contemporary moment must attend to the radically changed circumstances of its production and reception.

As new technologies evolve, they often give life to old ideas. In the expanding literature on the Web, one of the ideas that has been reintroduced to describe

the nature of the Web is that of 'noosphere' (Blondeau and Allard 2007). This idea, first advanced by the French thinker Pierre Teilhard de Chardin, envisaged a continuous membrane of information encircling the globe which he called the 'noosphere' (Teilhard de Chardin 1966: 63). The Web is seen by many as the concretization of this noosphere. The presence of a global repository of information, instantly accessible and containing a constantly multiplying set of links to other sources of information, suggests that the Web be seen not in territorial terms, but as a kind of transcendent noosphere containing the collective intelligence of humanity (Vanbremeersch 2009: 22). Leaving aside the inevitable coefficient of exaggeration in any characterization of digital phenomena, the omnipresence of digital sources and ways of knowing in the daily lives of many inhabitants of the planet is inescapable. The working practices of translators have been changed beyond recognition in terms of the access to many different kinds of knowledge that are afforded by the infrastructure of the internet. The challenges are, of course, how to situate translation in that emergent noosphere and where to place it in the future reconfiguration of language, culture, and society in the digital sphere.

The digital sphere, like any other, is no stranger to politics. The use of social media during the Arab Spring has been widely commented upon and it is notable that when analysts began to consider the implications of what was happening, they began to turn to translation as a framework of explanation (Mehrez 2012). The political economy of translation in the digital age most obviously involves who gets digital access and on what terms, and what gets translated for whom and in what medium. At another level, the potential instantaneity and accessibility of digital media imply a greater acceleration of translation flows with potentially subversive effects, but equally the widespread dissemination of translations that strongly domesticate images of other polities and cultures to the dominant political, economic, and cultural agendas. Integral to the new digital order are the translation realities of millions of migrants who find themselves in that translation zone between life in a new language and continued digital interactivity with the language in their country of origin. The economic and the political are inevitable partners in any attempt to understand how, over time and in the present, translation has shaped and been shaped by the tools it uses. There is much to be confused about, but confusion as a prelude to enquiry is not an ignoble condition. If beginnings are constantly changing, there is no better place to begin than with change itself.

# 1 The house of translation

In the introduction to his treatise *On the Use of the Astrolabe*, the twelfth-century scholar and translator Adelard of Bath has some words of advice for his patron Prince Henry, the future King Henry II:

You say that whoever dwells in a house is not worthy of its shelter if he is ignorant of its material and makeup, quantity and quality, position and peculiarity. Thus if one who was born and raised in the palace of the world should forbear after the age of discretion to know the reason for so marvelous a beauty, he is unworthy of it and, were it possible, ought to be cast out.

(Lyons 2010: 128–29)

Adelard is instructing his young pupil in the use of an instrument that will radically change the fortunes of travellers from the Christian West. His treatise is itself the fruit of years of translating from Arabic and a demonstration of the technical superiority of the Arab world. What is notable is that the metaphors the scholar employs are those of the built environment: ‘house’, ‘palace’, ‘material’, ‘makeup’. In other words, Adelard’s defence of a new form of maritime technology is couched in the language of an existing technology, the technology of human construction, the house or the palace, which provides ‘shelter’. For Adelard, understanding resides in knowing how the world works and that knowledge is inexpressible outside the language of artefacts. What his translations ultimately do is change the relationship between his readers and their world not so much through the words he writes, as through the new instrument he will cause them to use and understand. Human presence in the world can only be understood through and in the context of the made objects that mediate human existence.

## Tools

So why are tools so fundamental to a sense of what it is to be human, and what possible significance can this have for how we understand translation? The archaeologist Timothy Taylor points out that there are many good reasons why human beings should not exist:

Our skulls are so large that we risk being stuck and dying even as we are struggling to be born. Helped out by a technical team – obstetrician, midwife, and a battery of bleeping machines – the unwieldy cranium is followed into the light by a pathetic excuse for a mammalian body, screaming, hairless and so muscularly feeble that it has no chance of supporting its head properly for months. How did a species in which basic reproduction is so easily fatal, and whose progeny need several years of adult support before they can dress themselves, not just evolve but become the dominant species on the planet?

(Taylor 2010: 4)

Not only have humans become the dominant species on the planet, but they inhabit almost every conceivable environment from mountain plateaux to (however temporarily) the sea floor. So how do these members of the animal kingdom, with their weak eyes, fragile backs, and infant helplessness, come to occupy a situation of such pre-eminence? One answer must reside in what Taylor terms the ‘third system’. The first system comprises the system of physics and nonbiological chemistry, the second system is that of biology, and the third system is the set of material objects created and shaped by human beings (*ibid.*, 4–6). Evolution for humans is, in a sense, both biological and cultural. If we possess fire, tools, weapons, and clothes, we no longer need massive teeth, claws, and muscles, or a long, vegetable-absorbing gut. This permits humans to wrong foot conventional laws of natural selection which would dictate the inevitable disappearance of a notably fragile and vulnerable species of great ape.

What emerges from this reading of human evolution, the paradoxical survival of the weakest, is that third-system dependency leads to a particular symbiosis of the animate and inanimate. The trebling or quadrupling of human brain capacity which enabled the expansion and elaboration of the third system is itself the product of developments in the system itself. Changes in cooking, fermenting, and curing allowed for important gains in calorific value which enabled humans to absorb the high-energy, high-protein foods necessary to power large brains. These brains were and are perched on unusually short lengths of gut, a side-effect of the switch to upright walking (Wrangham 2007: 182–203). Thus, biology and *technē* interact in a manner central to human survival and development. It is the artificial realm that insulates us, cures and makes up for the deficiencies in our sight, metabolism, mobility, and memory. For this reason, when we speak about translation as a human activity, we need to take account of the intrinsic, and not simply extrinsic, involvement of *technē*. It is a question of ontology, rather than of utility. We evolve or are defined by the artefacts we use. The tools shape us as much as we shape them.

In assigning tools the importance they deserve in human evolution, it is also necessary to contextualize tool use. Tools are used by human beings for specific purposes, and these purposes, from the provision of food to the transport of infants, are predominantly social. One of the difficulties faced by humans, once they were erect, was that they had to transport defenceless infants. These infants were born prematurely, in that they could not feed themselves,